

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1648.—Vol. XXXVII.

LONDON, SATURDAY, MARCH 23, 1867.

(WITH SUPPLEMENT) {STAMPED ...SIXPENCE.
UNSTAMPED, FIVEPENCE.

Mining Exchange, London.

MINING EXCHANGE, LONDON.—As the rules of the Mining Exchange PROHIBIT all MEMBERS from ADVERTISING MINING SHARES at FIXED PRICES, the Committee feel it their duty to say that they have no means of offering redress to such of the public as may wish to purchase shares at fixed prices.

A List of the Members can be had on application to the Secretary.

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 23 years.)
HOLDERS of mining shares DIFFICULT to find in the OPEN MARKET may purchase for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the DISPOSAL of ABANDONMENT of doubtful mining shares may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

English Tin having advanced, all tin shares deserve special attention as probable investments. The general MINING market has been exceedingly brisk week, and a rise in nearly every share dealt in. As an exception, CHIVERTON, Moor, released, but are perfectly safe to buy for another advance.

SALES of WALES firm, and higher, with large transactions. Report excellent, and in the 45 east "every appearance of an improvement"—an item of importance. Shares safe to buy up to 60s.

WEST PRINCE OF WALES.—Mr. CROFTS offers his services to procure investments in these shares at par.

Telegrams instantly answered.
Bankers: National Bank of Scotland, Finch-lane.

WILLIAM LANE (SUCCESSOR TO JAMES LANE),
44, THREADNEEDLE STREET, LONDON, E.C. STOCK AND SHAREDEALER (Established Thirty Years), has FOR SALE the following SHARES:—

10 Bottle Hill, 4s. 6d.	10 F. Grenville, £2 8s 9d	50 Okel Tor, 25s. 6d.
10 Chiverton, £7 1/2	10 Gt. No. Downs, £4 1/2	50 Prince of Wales, 57s.
10 Caldbeck Fell, 17s 6d	25 Great Retallack, £2 1/2	10 Prosper United, £2 1/2
10 Chiverton Moor, £7 1/2	5 Great Laxey, £1 1/2	2 Providence, £3 1/2
10 Chontales, 55s.	5 Great Wh. Vor, £2 1/2	Rosewarne Consols.
10 Dale, 2s.	40 Gt. No. Laxey, 30s.	50 Redmoor, 8s.
10 Drake Walls, 14s.	10 Hingston Down, £2 1/2	50 So. Condurrow, 17s.
10 East Russell, £2 1/2	50 Lady Bertha, 2s. 9d.	25 South Darwen, 25s.
10 East Caradon, 55s.	50 North Trekerby, £2 1/2	25 West Chiverton, £61.
10 East Carn Brea, £2 1/2	10 North Croft, £2 1/2	25 Wheel Grenville, 11s.
10 East Lovell, £10 1/2	25 Marke Valley, £4 6s 3d	50 Wheel Crebor, 12s. 6d.
10 E. Rosewarne, 15s 6d	20 Mineral Rights, 8s. 3d.	

BUYER of New Quebrada, Okel Tor, Great Laxey, and Great North Laxey shares. The full market price given for either of the above.

Clients and parties in the country wishing to dispose of shares will find this advertisement a ready means of doing so, by forwarding me a list of their holding. Approved references given to any part of the United Kingdom.
Money advanced on approved mining shares.

MR. LELEAN, ENGLISH AND FOREIGN STOCK AND SHAREDEALER.
11, ROYAL EXCHANGE, LONDON, E.C.
Bankers: Roberts, Lubbock, and Co., Lombard-street.

GUIDE TO INVESTORS.—Mr. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for March contains the eighth of a series of articles on the whole circle of Investments; with such information as is necessary to guide intending investors amidst the shoals and quicksands of the multifarious species of investments that now present themselves.

Published by Mr. BAKER LELEAN, at his offices, 11, Royal Exchange, London, E.C. 6d. per copy, or 5s. annually, post free.

JOHN RISLEY, STOCK AND SHAREBROKER,
32, LOMBARD STREET, LONDON, E.C.
BUSINESS TRANSACTIONS IN EVERY DESCRIPTION OF STOCKS AND SHARES, on commission only.

Bankers: London and Westminster, Lothbury.

MR. WILLIAM WARD,
STOCK AND SHAREDEALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C.

JAMES D. GINN AND CO., STOCK AND SHAREDEALERS, 3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MESSRS. MCNEILL AND LONG, STOCK, SHARE, AND MINING DEALERS, 31, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN LITTLE, STOCK AND SHAREDEALER, 77, OLD BROAD STREET, LONDON, E.C. (late of Redruth).
Immediate attention to orders by telegraph or letter.
Prompt cash settlements.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREDEALERS, CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Closing Prices, Friday Evening, March 22.

Buyers. Sellers. Chiverton Moor, £7 1/2-£8 1/2. South Condurrow, £3 1/2-£4 1/2.

Clifford, 6s-7. Prince of Wales, 57s-58s. Cook's Kitchen, 12-12 1/2. North Rosekar, 8s-9s.

Chontales, 55s-56s. Tincroft, 15s-15 1/2. East Russell, 2s-2 1/2. Wheal Buller, 5s-5 1/2.

East Caradon, 55s-56s. Wheal Mary Ann, 10s-10 1/2. East Basset, 20-21. Wheal Seton, 13s-13 1/2.

East Lovell, 10s-10 1/2. Wheal Uny, 2-2 1/2. Great Laxey, 16s-17s. West Seton, 132 1/2-137 1/2.

Great Retallack, 3s-3 1/2. West Chiverton, 69-61. Great Vor, 21-22. West Drake Walls, 8s-9s.

North Croft, 2s-2 1/2. West Chiverton, 69-61. North Trekerby, 8s-9s. West Chiverton, 69-61.

Bankers: London and Westminster, Lothbury.
March 22, 1867.

MR. THOMAS THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.
Strongly recommends the immediate purchase of Westminister, Central Spence, and East Snafell shares.

WILLIAM MICHELL is a BUYER of any number of East

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of yesterday (Friday), March 22, No. 416, Vol. IX., price 6d. each copy, forwarded on contains information on the following mines:—

Great Wheal Vor.	Wheal Treilaway.	Grambler & St. Aubyn.
East Wheal Lovell.	Wheal Buller.	East Caradon.
West Caradon.	Great Laxey.	West Seton.
North Wheal Crofty.	Wheal Chiverton.	Herodsfoot.
North Rosekar.	West Chiverton.	East Carn Brea.
Prince of Wales.	Wheal Seton.	Devon Great Consols.
West Drake Walls.	Wheal Uny.	Tincroft.
Wheal Buller.	Wheal Grenville.	Hingston Down.
North Trekerby.	West Great Work.	South Caradon.
East Wheal Russell.	Great Retallack.	Chiverton Moor.

With a Special Report on East Wheal Russell, and an Article on Tin Mines and the Tin Trade.

PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—MR. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD STREET, LONDON, E.C.
Railway, Joint-Stock Banks, Dock, Insurance, Canal, Mining, Steam-ship, &c., and every other description of shares bought and sold at net prices.

TELEGRAPHIC MESSAGES TO BUY or SELL Railway, Bank, Mine, and other shares and stocks, punctually attended to, at net prices for cash, or for fortnightly settlements, with advice as to purchases or sales.

Twenty-two years' experience.

(Two in Cornwall and Twenty in London.)

Bankers: The Alliance Bank, and the Union Bank of London.

From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality, and to the best advantage of his clients.

DON PEDRO NORTH DEL REY—ANGLO-BRAZILIAN—PESTARENA UNITED GOLD MINING COMPANY—GREAT WHEAL VOR—EAST LOVELL—NORTH CROFTY—PRINCE OF WALES, &c.
Mr. PETER WATSON is a BUYER and SELLER, at close market prices, of shares in the above-named companies, 79, Old Broad-street, London, E.C.

MR. EDWARD COOKE, STOCK AND SHAREDEALER, 76, OLD BROAD STREET, LONDON, E.C.
Has SPECIAL BUSINESS in Chontales, Prince of Wales, East Lovell, Frank Mills, South Darwen, West Caradon, Prosper United, and North Croft.

Stock Exchange securities dealt in at close market prices.
Satisfactory references given in any town in the United Kingdom.
Bankers: Alliance Bank.

MESSRS. POWELL AND MOSS, 78, OLD BROAD STREET, LONDON, E.C. (Members of the Mining Exchange), STOCK AND SHAREDEALERS, transact business in the purchase and sale of every description of marketable securities, at close net prices, for cash or the fortnightly settlement.

A daily list forwarded on application.

Bankers: Bank of England.

MR. JAMES HUME, 74, OLD BROAD STREET, MEMBER OF THE MINING EXCHANGE.
Transacts buying and selling orders at net prices, equivalent to 1 1/4 per cent. commission:—

East Russell, £3 1/2-£3 3/4	Chiverton Moor, £7 1/2-£8
Crebor, 8s-8 1/2	East Chiverton, 13s-13 1/2
Prince of Wales, 54s-55s	West Drake Walls, 8s-10s
East Basset, 20-22	Wheal Uny, 2-2 1/2
Mary Ann, 13-14	Cook's Kitchen, 11-11 1/2
Great Wheal Vor, 21-21 1/2	North Trekerby, 2s-2 1/2

Some of the above may be bought with a certainty of a great rise in price. Mr. J. Hume's "Circular" for this month is now ready, and ought to be perused by all interested in mines, and by all intending investors.—6d. per copy, or 5s. annual subscription.

Bankers: The London Joint Stock Bank.

MESSRS. WILSON, WARD, AND CO., STOCK AND SHAREDEALERS, 16, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Can recommend two good mines for investment.

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 2, BUCKLESBURY, LONDON, E.C.
Business transacted in every description of stocks and shares at lowest market prices, free of commission.

All communications will receive immediate attention, either personally or by letter.

N.B.—LOVELL CONSOLS: Tin having further advanced, and the mine still improving, as will be seen by the agent's report in this day's Journal, intending investors should not delay purchasing at present low prices.

Bankers: London and Westminster.

GREAT SOUTH CHIVERTON MINE.—BARTLETT AND CHAPMAN recommend the PURCHASE of these SHARES for PERMANENT HOLDING. The mine is looking remarkably well, as will be seen by the agent's report in this day's Journal. £100 or £200 invested in this property cannot fail to prove highly remunerative.

Further particulars, with plans of the district, can be obtained on application to BARTLETT AND CHAPMAN, No. 2, Bucklebury, London, E.C.

THE INVESTMENT CIRCULAR AND FINANCIAL RECORD, published by BARTLETT AND CHAPMAN, No. 2, BUCKLESBURY, LONDON, E.C., should be consulted by all intending Purchasers of Mining or other Stock. Forwarded gratis and post free, on application.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, has BUSINESS, at close market prices, as BUYER or SELLER, in:—

Bedford United.	Dale.	East Gunnsallake.
North Croft.	West Caradon.	West Basset.
East Russell.	Chiverton Moor.	North Retallack.
Wheal Seton.	Great Retallack.	West Drake Walls.
Great Vor.	Great North Downs.	Devon Consols.
South Grenville.	Drake Walls.	Buller.
Prosper United.	Great North Laxey.	Lady Bertha.
Bryn Gwlog.	Crebor.	East Basset.
East Grenville.	Great North Downs.	Great Vor.
North Trekerby.	Caldbeck Fells.	South Condurrow.
West Chiverton.	Tincroft.	Providence.
Ding Dong.	Redmoor.	

T. ROSEWARNE is a BUYER of any part of 2000 Okel Tor, at market prices.

SPECIAL INFORMATION ON SHARES MARKED THUS *.

PRINCE OF WALES.—The falling off was not material, and the mine has again improved in one or two points, particularly in the 45 east. I say, again, there has been no young mine opened like it since East Caradon.

T. ROSEWARNE is a SELLER of Great Retallacks, for time on, below the present market price.

Money advanced on mining shares.
Bankers: Bank of England and Consolidated.

MESSRS. J. TAYLOR AND CO., MINING AGENTS AND SHAREDEALERS, 17, CROSS STREET, MANCHESTER, have FOR SALE:—

50 Penhale and Lomax.	20 Silver Brook.	100 Rosecliff & Tolcarne.
100 Great East Lovell.	100 N. Birch Tor & Vitiifer.	50 Great Mona.

J. TAYLOR and Co. strongly recommend the immediate purchase of Great Mona shares, which must soon command a good premium.

INVESTMENT, LOAN, AND BANK AGENCY. Established 1839.
BANKERS—London and County Bank.

Purchases and Sales of British and Foreign Stocks and Shares negotiated upon advantageous terms.

A record of the facts affecting the values of the various leading Public Securities is kept for the guidance of Investors.

Money received on deposit at the following rates:—

Repayable at 14 days' notice 4 per cent. per annum.

Deposits for three months certain 4 1/2 ditto

Ditto for six months certain 5 ditto

Loans granted on Stocks and Shares having a market value.

Bank and Money Agency Business generally undertaken.

CHARLES PETERS, Secretary.
No. 12, Clement's-lane, Lombard-street, London, E.C.

M. R. CHARLES THOMAS, MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER, 3, GREAT ST. HELEN'S, LONDON, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, UNION CHAMBERS, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Mr. THOMAS can now recommend two mines, the market prices of which are below £1 respectively, especially for an early and great advance; names and full particulars he will forward upon application, accompanied by 5s. stamps.

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE, LONDON, E.C. (Members of the Mining Exchange), STOCK AND SHAREDEALERS, AND FINANCIAL AGENTS, transact business in all kinds of securities at closest net prices for cash or account.

Parties of respectability can have transfers registered in their names previous to payment.
Daily price list on application.
Bankers: London and County Bank.

SAFE INVESTMENTS FOR CAPITAL. Paying 5 to 20 per cent. per annum upon the outlay.
SHAREHOLDERS, CAPITALISTS, TRUSTEES, and INVESTORS seeking valuable and reliable information, and requiring safe, sound, and profitable investments, should at all times consult

SHARP'S GENERAL INVESTMENT CIRCULAR (Post free).
It is a safe guide, giving every information to shareholders and capitalists.
GRANVILLE SHARP, STOCK & SHAREDEALER, 32, POULTRY, LONDON.

M. R. JOHN B. REYNOLDS OFFICES, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.

Business transacted in British and Foreign Stocks, Railway, Bank, Insurance, Financial, or Mining Companies Shares, and all Miscellaneous Securities, at the lowest market quotations.

Exchanges effected and purchases found for shares not generally marketable.
Mr. REYNOLDS is a BUYER or SELLER of Great Retallack, Great Laxey, Rose and Chiverton, Great Wheal Vor, West St. Ives, West Kitty, North Dolcoath, West Great Work, North Croft, and all market mines.

All communications from clients are treated as strictly in confidence.
Telegrams promptly attended to. Established Ten Years.
Bankers: City Bank.

MONEY MARKET, BANKS, RAILWAYS, MISCELLANEOUS, MINING, INSURANCE, AND OTHER COMPANIES.—REYNOLDS'S "INVESTORS GUIDE" for March contains most interesting and valuable statistics, and some startling facts of the utmost service to speculators and investors. Intending investors will do well to consult this Circular before operating. Copies forwarded on application to Mr. JOHN B. REYNOLDS, 70 and 71, Bishopsgate-street, London.

WEST ST. IVES.—The attention of Capitalists is particularly directed to the merits of this property. I have SPECIAL BUSINESS in these shares, both as BUYER and SELLER, and am prepared to furnish a copy of Capt. Pope's report to any applicant, together with copies of subsequent report, on receipt of stamps, 2s. 6d.

J. B. REYNOLDS, 70 and 71, Bishopsgate-street, London, E.C.

ROSE AND CHIVERTON UNITED.—A ground plan and section are now on view at the offices of the company, as well as a special report of Capt. Hancock, of Polberro. Both of these can be inspected on application, and copies of his report, and another special report, be forwarded on receipt of stamps value 2s. 6d.

J. B. REYNOLDS, 70 and 71, Bishopsgate-street, London, E.C.

MR. EDWARD BREWIS TRANSACTS BUSINESS in all MINE STOCKS and SHARES, at net prices, for cash or account.
Clients' business telegrams promptly attended to.

8, Warrford-court, Bank, E.C., London.

MESSRS. FREDERIC GILL AND CO., STOCK AND SHAREDEALERS, AND FINANCIAL AGENTS, ST. CLEMENT'S HOUSE, CLEMENT'S LANE, LONDON, E.C.
A FEW SHARES in a good MINING COMPANY TO BE SOLD.
Bankers: City Bank.

MR. WILLIAM SEWARD, STOCK AND SHAREDEALER, 19, THROGMORTON STREET, LONDON, E.C.

GEORGE RICE, STOCK AND SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C. (Member of the Mining Exchange), (25 years' experience), TRANSACTS BUSINESS in MINING SHARES, at close market prices.

SPECIAL BUSINESS in Chiverton Moor, East Lovell, Great Vor, North Croft, West Chiverton, and Prince of Wales.

Money advanced on mining shares.
March 22, 1867.
Bankers: Bank of England.

MATTHEW GREENE, STOCK AND SHAREDEALER, ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
MATTHEW GREENE is always prepared to deal at close prices in Stock Exchange securities and mining shares, and has FOR SALE the FOLLOWING SHARES, net and free of commission:—

10 Chiverton Moor, £7 1/2	20 East Russell, £2 1/2	50 Prince of Wales, 57s.
80 Chontales, £2 1/2	10 Gt. Laxey (x.d.), £17	20 New Clifford, 40s.
5 Clifford, £7 1/2	50 Gt. No. Laxey, 30s.	100 East Snafell.
		10 Westminster, £5.

MATTHEW GREENE can recommend two low-price mines for a safe rise.
Bankers: Messrs. Ransomes, Bouverie, Pall Mall, and Imperial Bank, City.
A daily list of prices post free on application.

MR. G. D. SANDY, STOCK AND SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS IN EVERY DESCRIPTION OF STOCK EXCHANGE SECURITIES, MINING AND FINANCIAL ENTERPRISES, at close market prices.

Mr. G. D. SANDY'S Circular for the present month, is now ready, and should be perused by all interested in mining enterprise. Gratis, post free.
Correct Daily Price List may be had on application.

Money advanced to any amount on legitimate stocks and shares.
References exchanged.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 12 years), has FOR SALE the FOLLOWING SHARES, at net prices:—

50 Wheal Agas, 12s. 6d.	5 W. Chiverton, £61.	60 North Downs, 8s. 9d.
10 Wb. Margaret, £67 1/2	15 East Lovell, £10 1/2	20 Wb. Chiverton, £7 1/2
4 South Croft, £18 1/2	50 Redmoor, 3s.	50 Crebor, 9s. 6d.
30 S. Condurrow, 16s. 9d	60 Prince of Wales, 57s. 3d	10 E. Caradon, £5 8s 9d
20 Chiv. Moor, £13s. 9d	40 Wb. Grenville, £2s. 6d	50 Bottle Hill, 3s.
2 Wheal Basset, £68 1/2	30 Prosper Unit, £3 13s	60 So. Grenville, 7s. 6d.
80 Mineral Rights, 8s	60 Caldbeck Fells, £7 1/2	25 Wheal Uny, 41s.
3 South Frances, £18 1/2	2 East Basset, £20 1/2	30 West Kitty, 7s. 3d.
40 W. Pr. of Wales, 9s 6d	3 Wheal Buller, £22	40 Drake Walls, 13s.
25 Okel Tor, 24s. 6d.	5 Gt. Wb. Vor, £21 1/2	50 Gt. No. Laxey, 27s 9d
20 E. Carn Brea, £2s.	25 Gt. No. Downs, £2 1/2	3 Providence, £38 1/2
5 West Caradon, £2 1/2	30 North Croft, £25 16s	5 Clifford, 47s.
25 East Seton, 5s. 9d.	15 Trelyon Cons., £2 16s	50 Hallenbeagle, 8s. 3d.
20 Gt. Retallack, £3 6s.	10 Kitty (St. Ag.), £2 19	15 East Russell, £3 11s
35 Snafell, 13s. 9d.	50 E. Snafell, 23s. 9d.	1 Wheal Seton, £10 1/2

MR. R. EMERSON, 28, GREAT WINCHESTER STREET, LONDON, E.C., has the FOLLOWING SHARES FOR SALE:—5 Wheal Jane, £7; 20 Cardigan Consols, 35s.; 50 Snafell, 20s.; 100 East Bottle Hill, 5s.; 60 Okhampton Mining Company, 11s.; 5 Dyfnwmb, £5; 100 Gwydr Park, 2s. 6d.; 6 Hematite Iron Ore Company, £3 (fully paid); 10 Leeds and St. Aubyn, £2. And is a BUYER or SELLER of Great Laxey, Wheal Alice Alfred, West St. Ives, Budnick Consols, and Rose and Chiverton.

WANTED AN OFFER for 25 Crystal Palace Hotel Shares, £10 paid.
My numerous clients, desirous to be furnished with more detailed information upon Mining property than can be well supplied in an advertisement, I am issuing a Circular, containing valuable information, which will be forwarded to them at their request.

Advice given on the sale and purchase of shares.
Eighteen years' experience in Cornwall and thirteen in London.

MR. JOHN HOSKING, MINING ENGINEER, (Late of Ashburton, Devon).
Mr. HOSKING, having had 20 years' practical experience, OFFERS HIS SERVICES as MINE SURVEYOR, VALUER of MINING MACHINERY, or to INSPECT any MINING PROPERTY, either at home or abroad. Terms on application.—14, Liverpool-street, London, E.C.

Original Correspondence.

COAL MINES INSPECTION.

PROPOSED NEW GENERAL RULES BY INSPECTORS, AND INCREASED SAFETY IN COAL AND IRONSTONE MINES.

SIR,—Inspection of Coal Mines has now extended over a sufficient length of time to afford the required information to judge of its efficiency and usefulness. Recent serious explosions have excited great interest in the matter. Is the present system of inspection sufficient to give satisfaction to the public and to ensure the minimum of fatality? Is it desirable that it should be extended in any way?

All satisfactory inspection must be based on well-considered, well-defined, and strictly enforced general and special rules. Any other system would create confusion and disorder. The joint and separate reports of the Inspectors, in reply to the circular letter of the Secretary of State, dated Dec. 26, 1866, has now been printed. As is the case with doctors, so is it in the case of the Inspectors; they did not unanimously agree as to alterations in the general rules or increase of Inspectors, or in restricting the area worked by a pair of shafts. Other persons are justified in dissenting from the conclusions they come to. Probably further enquiry will, and possibly further legislation may, result. The propriety of these enquiries and legislation cannot be doubted. The awful loss of life in Staffordshire and Yorkshire in December last fully justifies it. What can be done to prevent the recurrence of such calamities? Has the application of scientific knowledge and practical experience, every known means of prevention, been fairly and fully tried, and lamentably failed, or have they been ignorantly, carelessly, or wilfully neglected? Are there any further precautions known and applicable, or are we to await with hopeless resignation a second edition of December's bills of mortality? We trust not. Every recurring fatality should, and we believe really does, increase the subsequent safety of coal mines. The working of coal mines has not yet reached the limits of further improvement. How important, then, it is to seek to derive from the painful lessons and experience of the past the utmost possible advantage for our future guidance.

Mining engineers, or colliery viewers (I rather prefer the time-honoured designation), no doubt do not over-highly estimate the value of recommendations coming from non-professionals. This is natural enough, and may not imply that they think themselves the possessors of superior natural, but rather of acquired, capabilities on the matter, the result of special training. It is as unlikely to find a landsman competent to the duties of a naval officer as to find an inexperienced, untrained persons qualified to deal with the requirements, necessities, difficulties, and dangers of a coal mine. The scene of operations is completely hidden from ordinary observation in the depth and gloom of subterranean darkness. Few persons, not called by duty, venture there. A most salutary and proper feeling restrains them. The public generally, however, feeling a deep interest in the subject is one reason for the appointment of properly qualified Inspectors, who may by personal inspection satisfy themselves that all reasonable precautions are taken to ensure the safety of the workmen.

It is very satisfactory to find that the qualifications of the Inspectors hitherto appointed are not doubted either by professional men or the public, nor, I believe, by the workmen generally. All of them may not be the best mathematicians, the most scientific, practical, or experienced men that could be obtained; some of them are. They all have, at least, been trained to mining pursuits. They are just the class from which the persons are derived who are entrusted with the management of the most difficult mines of the country. Some persons are of opinion that, as is the case with some other matters, the appointments are very much affected by interested influence, and, indeed, I am aware that some of the most qualified persons have declined to make application for the appointment for that reason. Notwithstanding, whilst there have been murmurs of the appointment of unlearned youth and inexperience, the general fitness of those appointed has not been questioned.

When for a lengthened period the statistics of the fatality in coal mines are collected, the results are no doubt startling. In the report of the Committee of the House of Commons, which examined a large number of witnesses last year, a statement prepared by Mr. Atkinson, Inspector for South Durham, is given, which shows that for the ten years, 1856 to 1865, both inclusive, the fatality in coal mines had during that period been very considerably reduced in proportion to the coal raised, as will be seen by the following summary:—

	Total number of deaths from accidents in and about coal mines.	Total number of tons of coal raised.	Tons of coal raised per life cost.
1856	1022	71,787,552	70,242
1857	1122	74,611,941	66,430
1858	931	73,725,895	79,190
1859	905	78,278,957	86,496
1860	1109	82,662,702	74,538†
For five years, 1856 to 1860, inclusive	5089	381,067,047	74,890
1861	936	90,706,796	96,907
1862	1133	90,989,666	80,202‡
1863	907	92,819,855	102,337
1864	867	95,122,419	109,714
1865	984	98,911,169	100,519§
For five years, 1861 to 1865, inclusive	4827	468,548,905	97,068
For ten years, 1856 to 1865, inclusive	9916	849,615,952	85,680

* Lund Hill explosion occurred in 1857.
† Burradon, Hecton, and Risca explosions occurred in 1860.
‡ Hartley accident, by breaking of engine pumping-beam, occurred in 1862.
§ An explosion occurred in South Durham in 1865.

The average of the first five years gives one death to every 74,890 tons of coal raised. If the same rate of fatality had continued during the second five years, it would have amounted to 6257 deaths, whereas it was only 4827, or 1430 less during the latter than during the former period, in proportion to the tons of coal raised. Whether this diminution of fatality is entirely the result of inspection is very properly doubted. Education has been more widely extended. Information has been more widely diffused. The practice and improvements of the most advanced districts have become not only better known, but adopted by other districts, and more strict attention has been directed to enforcing the general and special rules. Officers do not relish appearing before a coroner's inquest, assisted by the practical knowledge of the Inspector, charged with not attending to and enforcing these rules. All these combined, together with the fact that the Inspector in most cases, and, indeed, in all cases of doubt, examines the place where a fatal accident has occurred, have no doubt caused increased attention to safety, and consequent reduced fatality since the beginning of inspection. It is, however, a question—and it is a pity that the statistics required are not to be found—of curious interest and importance, how far the improvement of the last 10 years has exceeded (if at all) that of the previous 40, in proportion to the coals raised. However this may be, my own conviction is that the improvement of the last 10 years is more due to the Inspection Act than the act of inspection; and that it is most desirable that inspection, independent of the occurrence of fatal accidents, might be beneficially extended.

What I should call pre-inspection would be a great relief and advantage to colliery owners and viewers. They would feel more satisfied that the due observance of the rules were generally and properly attended to, or if neglected, reported by an independent person. It would ensure greater watchfulness and care on the part of the officials, and would materially assist in maintaining strict discipline amongst the workmen in all matters relating to safety. It would help to make the safety of the persons employed in the mine what it ought to be—the primary object of attention both by the Inspectors, colliery owners, viewers, officials, and workmen, and would not only give satisfaction to the public and relatives of the sufferers, but to all parties concerned, when a single fatal accident or serious calamity occurred, to be assured there had been no want of care or attention to safety.

To effect this in a satisfactory manner is, without doubt, beyond the capabilities of the present staff of Inspectors. On an average they have (in addition to ironstone mines) 268 collieries each to attend to—some of them upwards of 500—and from 80 to 150 fatal accidents each per year to investigate, together with all their other duties of correspondence, framing rules, reporting to Government,

prosecuting delinquents, &c. In South Staffordshire and Worcestershire, and in South Wales, the Inspectors had, in 1865, 542 and 338 collieries to inspect, besides having (one of them at least) an average of nearly three fatal accidents per week to investigate and report on. During the same year, whilst the average fatality was one death for every 100,519 tons of coal raised in South Wales, it was one to 53,656 tons. It is curious to observe that from Durham southward, along the eastern range of the coal mining districts, the fatality progressively increases till we reach South Wales, it being in the former district, in 1865, one death to 172,944 tons, and in the latter one death to only 53,656 tons of coals raised; and the number of collieries under each Inspector is 161 and 338 respectively. Considering all the circumstances, I believe I am justified in stating that hitherto actual inspection prior to fatal accidents has contributed little or nothing to increased safety or reduced fatality, it being utterly impossible that it should be otherwise, the present staff of Inspectors being inadequate for the purpose; and that if inspection is to be extended, it can only be so by an increased number of Inspectors or sub-Inspectors.

The present Inspectors have duties enough to attend to—some of them too many. The number might be advantageously increased by appointing one more to each of the following districts—Yorkshire with 422, South Staffordshire and Worcestershire with 542, and South Wales with 338 collieries for one Inspector. This would reduce the number of collieries under each Inspector, on an average, to little more than 200. To give each of these one careful inspection with 15 Inspectors, instead of 12, as at present, and allowing one Inspector to visit, on an average, four collieries per week, would take each Inspector a whole year to visit each colliery once; and to visit each colliery once in three months, or four times a year, would require five times the present staff of Inspectors. Supposing each Inspector costs the country 800l. per year, and the number to be increased fivefold, or to 60 for the 3215 collieries in England, Scotland, and Wales, the cost would be 48,000l. per annum for a quarterly inspection of each colliery. This would be a serious cost. Is it necessary? Can such inspection not be as well, or better, effected by sub-Inspectors? Such sub-Inspectors to be men of not less standing than 10 years as underwriters. Suppose the Inspectors to be increased to 15, and each to have three sub-Inspectors under him, at a cost of (say) 400l. each per year, the annual cost would be 30,000l. instead of 48,000l., or about one-fourteenth of 1d. per ton on the coal raised.

The duty of the sub-Inspector would be to visit collieries daily, and carefully examine how the general and special rules are attended to, and also to ascertain the general condition of the mine as to ventilation, &c. He might be required to enter in a book kept at the colliery his report as to the observance of the rules and the state of the mine as to safety, in addition to reporting to the Inspector of the district, whose duty, in addition to those already performed, would be to attend without delay to any cases of breach of rules, neglect, defective arrangements, or danger. I believe this would do more to improve the safety of coal mines than extending the present system, because the chief Inspectors' duties would remain as at present, and be supplemented by a personal examination of mines by the proposed sub-Inspectors. Nor would it in any way lessen the duties and responsibilities of the owners or their officers, but rather tend to increase them; nor would it increase the responsibility of Government, because it would involve no further interference with the management than the enforcement of the rules required.

I recommend this more effective inspection more particularly on account of its giving more general satisfaction than is at present felt. I do not anticipate any great diminution in the number of fatal accidents as the immediate result. For this reason, after upwards of twenty-four years practical and responsible experience as a colliery viewer, and from paying considerable attention to the question, it is my most decided conviction that (perhaps excepting fatality arising from serious explosions) any considerable reduction of fatality can only be effected by increased care on the part of the workmen themselves. This will be the work of time, and no doubt would be accelerated by the examinations and reports of the sub-Inspectors, as herein recommended.

It will be clearly seen that my own opinion is that the system of inspection, of whatever form, should be strictly based on the general and special rules, and limited to their enforcement. No other system could possibly give satisfaction. Were it in any degree based on the personal opinions of the Inspectors themselves, however well qualified they might be, it would be unsatisfactory. Differences of opinion amongst the Inspectors themselves would produce confusion, and the greater their number the greater would the confusion and discord become. Nor can it be expected that the opinions of colliery viewers would at all times harmonise with the Inspectors. These considerations give importance to the adoption of a fixed standard of rules and regulations, sanctioned by Act of Parliament, and equally binding on Inspectors, sub-Inspectors, colliery viewers, and officers and workmen; and if combined with the principle of individual responsibility for the due observance of the provisions of the rules, and the proper performance of the duties devolving on them, in the situation occupied, of whatever class, would, no doubt, be attended with beneficial results and ultimate reduction of fatality.

If the principle of basing the entire system of inspection on general and special rules, in contradistinction to that of the personal views and opinions of the Inspectors, be fully and generally admitted, the careful compilation of such rules becomes of vital importance. With such a guiding principle, and sub-Inspectors selected from the class referred to, I should not object—indeed, I should rather prefer—to have a sub-Inspector permanently on the colliery. Without such a principle inspection would become a source of perpetual anarchy, confusion, and strife, and would do more harm than good. Without a more extended and strict code of rules, and without more frequent, or, indeed, periodical inspection, cases of fatal accidents, especially those most lamentable and destructive explosions, will constantly produce dissatisfaction in the minds of the workmen and the public.

The alterations in the general rules—applicable to all mines—proposed by the Inspectors, having already appeared in the *Mining Journal* of the 2d inst., it is unnecessary to repeat them. I think a little alteration or classifying of them would make them more readily understood and remembered. For instance, those referring to the machinery—12, 11, 14, and 13, and those referring to the shafts 17, 4, 5, 7, 10, 9, and 6; and those referring to the interior arrangements of the mine, 1, 2, 3, 16, 15, and 8 would be better arranged in the order I here place them. In addition to the rules respecting the machinery, I would suggest the following:—Excepting persons having the charge of, or employed in working, cleaning, oiling, or inspecting engines, or machines, for raising coal, water, mineral, or persons, no person shall be allowed to enter the building containing them or remain therein whilst such are being worked, whether situated on the surface or within the mine. This would prevent the attention of the person responsible from being diverted, and increase the safety.

Rule No. 14 should be extended to all the revolving wheels of self-acting inclined and engine planes, whether on the surface or within the mine.

Rule 5 and 6 should both provide, "excepting when special repairs, or other special operations," &c.

Rule 7.—I would suggest it as being worthy of consideration, whether a uniform code of signals should be enforced by the general rules instead of by the special rules, such code to apply to all collieries and mines. The general rules, Nos. 12, 11, 14, and 13; and 17, 4, 5, 7, 10, 9, 6, and 8 affect causes, producing nearly 40 per cent. of the fatal accidents which have occurred during the 10 years already referred to, as shown in the following table:—

	Five years, 1856 to 1861, no. of deaths.	Proportion per cent.	Five years, 1862 to 1866, no. of deaths.	Proportion per cent.
1.—Miscellaneous accidents in mines and above ground	967	19.00	2,234	22.53
2.—Shaft accidents	916	18.00	1,710	17.24
Miscellaneous accidents and shafts 1863	37.00	3.94	39.77	
3.—Falls of roof and coal	1222	37.75	3,953	39.87
4.—Explosions of fire-damp	1234	25.25	2,019	20.36
Total	5089	100.00	9,916	100.00

It will be seen that of the 12 general rules referring to the miscellaneous and shaft accidents, only one, No. 17, is a new one, Nos. 13, 5, and 9 being altered, whilst 12, 11, 14, 4, 7, 10, 6, and 8 remain as before. In carefully looking over these rules, and being convinced

how little they can be improved, it becomes increasingly evident to my mind that only increased care on the part of the workmen themselves can at all affect a large proportion of this class of accidents, if the above rules were generally enforced. Nearly another 40 per cent. of the fatal accidents of the last 10 years have been caused by falls of coal and roof, yet the Inspectors seem to have found it difficult or impossible to frame a general rule applicable to the case. Some persons are for laying the whole of the responsibility of this class of accidents on the owner or officials, whilst others consider that the workman himself is the most proper person to be held responsible for his own safety. Certainly they are the only persons who can be so, as it regards falls of coal, and in regard to supporting the roof they at least ought to be most responsible, as they are always present, and cannot be compelled to work where there is danger.

It must also be remembered that the condition of the place where the workman is actually engaged in removing the coal is constantly undergoing change, the result of his working. It is clear, then, that to inspect him, so as to take the entire responsibility from him and place it elsewhere, would require an Inspector to be constantly in attendance to watch over his safety. In considering this part of the subject, we ought to separate the falls of coal from the falls of stone or roof. Peculiarities in different beds of coal produce a decided influence on this class of fatality. For 1865, in South Durham district the fatality from falls of roof were 21, and only one from falls of coal, whilst in the Yorkshire district it was 10 and 12, and in South Staffordshire and Worcestershire district it was 13 and 35. Taking the first two districts named, the fatality by falls of stone was Durham one death to 675,306 tons, and Yorkshire one death to 930,000 tons, and for falls of coal it was Durham one death to 14,181,483 tons, and Yorkshire one death to 775,000 tons; whilst the death from falls of coal in South Staffordshire district was one to 291,471 tons of coal raised in 1865. It will thus be seen that in Yorkshire for the year 1865, where it is exclusively the collier's duty to secure himself from falls of stone, the fatality from this cause is much less, compared with the coals raised, than it is in Durham; whilst for the same year the fatality arising from falls of coal is nearly 20 times that arising from the same cause in Durham. I compare those two districts solely because in Yorkshire the colliers are themselves responsible for the efficient support of the roof, whilst in Durham this is attended to principally by a different class of persons—the deputies. I may observe, however, that comparing the fatality with the coal raised is not at all a uniformly applicable standard, because from a variety of causes, such as the thickness or the hardness of the bed of coal worked, whether the coal is worked by separation (part being left in the mine) or by altogether working (when more is left in the mine), the extent to which stone-pack walls are used to support the roof, the extent to which ponies are used in tramping and machinery in conveying the coal underground, all very considerably affect the number of persons required to raise a given quantity of coal, as will be seen by the following table for the year 1865:—

	Total quantity of coal raised, tons.	Number of persons employed, per year.	Coal raised for each person employed, per year.	Number of persons employed, per ton of coal raised.
1.—South Durham	14,181,483	35,943	418	161
2.—Yorkshire	10,409,900	25,035	416	163
3.—East Scotland	10,201,500	27,000	377	162
4.—West Scotland	6,400,000	18,375	348	223
5.—North Staffordshire, &c.	6,400,000	21,150	302	270
6.—West Lancashire, &c.	8,000,000	27,600	290	180
7.—South Wales	8,531,336	29,076	290	338
8.—Derbyshire, &c.	7,575,000	27,089	279	205
9.—North and East Lancashire, &c.	6,312,000	23,525	268	258
10.—North Staffordshire, &c.	5,600,000	21,000	266	236
11.—Yorkshire	9,300,000	35,000	265	422
12.—Monmouthshire, &c.	6,000,000	26,658	225	225
Total	98,911,169	315,451	313	3215

Probably Mr. Brough could here point out where the hungry workman to which he refers in his report exists. The degree of safety based on the tons of coal raised in each inspection district is as follows:—

	Tons of coal to one death in 1865
1.—South Durham	172,944
2.—Yorkshire	169,091
3.—East Scotland	136,170
4.—West Scotland	118,518
5.—North Staffordshire, &c.	112,101
6.—South Staffordshire, &c.	107,092
7.—Northumberland, &c.	107,314
8.—North and East Lancashire	95,636
9.—Derbyshire, &c.	92,383
10.—Monmouthshire, &c.	73,170
11.—West Lancashire and North Wales	68,965
12.—South Wales	53,656
Average of the whole	100,519

The degree of safety calculated or based on the fatality to the number of persons employed is as follows:—

	Persons employed per life lost for 1865
1.—Yorkshire	626
2.—East Scotland	450
3.—South Durham	414
4.—North Staffordshire	403
5.—North and East Lancashire	340
6.—West Scotland	336
7.—Derbyshire, &c.	330
8.—Monmouthshire, &c.	325
9.—South Staffordshire, &c.	296
10.—Northumberland, &c.	258
11.—West Lancashire, &c.	238
12.—South Wales	182
Average of the whole	321

The number of collieries in each inspection district in 1865 is:—

	Number of collieries
1.—South Staffordshire, &c.	542
2.—Yorkshire	422
3.—South Wales	338
4.—East Scotland	270
5.—North and East Lancashire	268
6.—North Staffordshire, &c.	226
7.—Monmouthshire, &c.	225
8.—West Scotland	223
9.—Derbyshire, &c.	205
10.—West Lancashire, &c.	180
11.—Northumberland, &c.	165
12.—South Durham	161
Average of the whole	268

The reason I have recommended one additional Inspector to the three following districts—South Staffordshire, &c., the great number of collieries; Yorkshire, its liability to various explosions; and South Wales, its sad condition as to fatality.

Although for the ten years already referred to explosions have not caused more than about one-fifth (20.36 per cent.) of the total fatality in and about coal mines, and although probably half of such fatality has occurred in cases where only one person has suffered from any given explosion, still the very large number of persons who occasionally are killed by them does and always has caused them to be considered the worst class of fatality. For the four years, 1856 to 1860, inclusive, the total fatality from explosions was 1284, or 25.25 per cent., or one death for every 296,773 tons of coal raised. For the five years, 1861 to 1865, inclusive, it was 735, or 15.22 per cent., or one death for 637,481 tons raised. This shows an average diminution of fatality from this cause during this time. The data is defective, but some time ago I estimated the fatality over a longer period from this cause as follows:—

	Average of 1800 to 1815	1 death per 86,000 tons.
1815 to 1820	36,000	
1820 to 1825	275,000	
1825 to 1830	215,000	
1830 to 1835	296,773	
1835 to 1840	229,000	
1840 to 1845	637,481	

This clearly shows a great diminution of fatality from this cause; indeed, I am most decidedly convinced, in my own mind, that this class of fatality has been more reduced than any other in proportion to the coal raised. The following is a calculation I made some time ago, which shows the deaths by accidents, from all causes, to coal raised from 1800 to 1863. It is no doubt very imperfect, but still an approximation:—

	Average of 1800 to 1815	1 death per 43,000 tons.
1815 to 1820	48,000	
1820 to 1825	60,000	
1825 to 1830	75,000	
1830 to 1835	102,637	
1835 to 1840	97,068	
1840 to 1845	109,714	

From this it appears that whilst eight times the coal is now raised for one death by explosions which was raised from 1800 to 1815,

there is only two-and-a-half times the quantity raised to one death from all causes. There is not, nor can there be, the slightest doubt that more attention, and consequently more improvement and reduced fatality, has been given, effected, and produced in this department of coal mining, than in any other involving safety to life, during the present century. *I believe the reason is equally clear that this being a matter which more particularly, or entirely, devolves on colliery viewers than any other cause of fatality, they have devoted themselves to it with a successful result; and no doubt they remain equally ready to continue their exertions to meet the expanding requirements of our constantly extending coal mines.* All the most able viewers, from the justly celebrated John Buddle to the present day, have competed with each other to produce this effect—the reduction of fatality from explosions. Buddle estimated that in his time one-half of the entire fatality in coal mines was the result of explosions. For the ten years already referred to the fatality from all other causes has been 7897, which, according to Buddle's rule, would have made a total of 15,794, instead of what it actually has been, 9916—or 9916 from explosions, instead of 2019. COLLIERY VIEWER.

[To be continued in next week's Mining Journal.]

ON THE IDENTITY OF THE BANGOR AND NANTLLE VEINS OF SLATE.

SLATE QUARRYING IN WALES, BY "A TOURIST."—CARNARVON AND BANGOR SLATE COMPANY (LIMITED), BY THE SECRETARY.

SIR,—I am now about to adduce a few reasons for declining to accept the theory, often, I admit, adopted by superficial observers, that the veins of slate known as Colonel Pennant's and Assheton Smith's, are to be found in Nantlle Vale. There may be a fragmentary portion of these veins on the extreme southern edge of the slate range of that valley, as I shall presently show; but I believe it to be physically impossible that any of the so-called Bangor veins can traverse the northern side, or the centre of the valley. By "Bangor veins" I mean distinctly the veins passing through Colonel Pennant's and the late Mr. Assheton Smith's quarries. There are other veins which might with equal propriety be called "Bangor veins," to which I shall have occasion to refer; but the great point in question applies to those alone in the two celebrated quarries, between which, and many others, some identity is so often sought to be established.

Respecting the quality of the slate in these great quarries (for great they have become by comparison with all others, simply by effluxion of time, for at one period their produce was carried on horses' backs), there are wide-spread popular errors. Bangor slates, as they are called, or Dinorwic slates, are no better, in any respect, than the slates from many other quarries, and in one of those, at least, there is, probably, a larger amount of hard, coarse, and inferior rock than any other quarry produces. It is an entire mistake to suppose that for any one excellence of character attributable to, or possessed by, slate, these quarries are superior in their produce to many others.

There is abundance of slate in Nantlle, which, for metal, split, and purity, is equal to the best ever produced in the Bangor quarries; and I have seen slates from another district which it would be difficult for either of those quarries to match, and impossible for them, in any respect, to surpass. Thus much, by the way, as to one popular error into which amateurs and "Tourists" are apt to fall.

To obtain a tolerable knowledge of slate veins, slate quarries, and slate quarrying requires much more time and earnest thought than most persons would imagine, or would be disposed to devote, or could devote, to the subject.

As to the identity of the Penrhyn and Dinorwic veins with those of Nantlle, I wish to take the reader, in imagination, with me, if he knows anything of the country, and the geology of the district; and I must ask him, at the same time, to exercise his phrenological faculty, called "locality," while I place him on the summit of the hill opposite to the Llanberis lakes, and facing Assheton Smith's quarry; he will then easily perceive the continuity of the veins from Colonel Pennant's to the Dinorwic Quarry. There is, in fact, no question about the identity of the slate in these quarries. But a remarkable geological feat has been performed at the Llanberis lakes, where a great fault occurs. These lakes are reputed to be of great depth, and are, undoubtedly, without having recourse to wild traditions as to their being unfathomable, of a depth somewhat commensurate with the elevation of the mountain at whose feet they lie.

The slate veins have been apparently cut off at right angles by the lakes; at least, at that point they vanish from human sight, and dip, undoubtedly, to the bottom of the lake. The undulation of those veins eastward carries them from the lakes over the crest of the mountain to Colonel Pennant's Quarry, where another wave-like dip occurs towards Bethesda, and they are again lost in another fault. Westward from the Llanberis lakes they dip underneath the opposite hill, and re-appear, possibly, miles distant from the spot where they last dipped from sight. I shall, probably, at a future time indicate where they are next to be found, but they do not appear on the slope of the hill on the western side of the Llanberis lakes. Now, to prove that the veins I have been describing cannot be the veins seen in Nantlle Vale, I must request the reader to follow me in imagination to the northern side of Colonel Pennant's Quarry, and then in a line eastward for two or three miles. On the northern side of Colonel Pennant's Quarry will be found a large body of felspathic rock, with here and there a dash of greenstone (I am writing entirely from memory), and on the northern side of the felspathic and greenstone rock are veins of slate a mile or more in breadth, running parallel with the veins in Colonel Pennant's Quarry. If we proceed farther east, to the Royal Bangor Quarries, we get a full view of these gigantic veins of slate, including those of the last-named quarries, and extending for more than a mile in breadth towards Penrhyn Castle. Not one of these veins is to be found in Colonel Pennant's or Assheton Smith's quarries, but all lie contiguous to, and run parallel with them, on the northern side. These veins have not been submerged in the great fault at Llanberis lakes. They were too far north to be subjected to that amount of disruption or depression, though, probably, they were shifted a little eastward, and are the veins traceable all the way, at intervals, through Bettws Garmon and Moel Tryfan, on to Nantlle. Another fact in support of this view seems to me wholly unanswerable. It is admitted that the northern boundary of the slate range in Nantlle is in the Talsarn Quarries, where the slate is impacted upon the felspathic rock; and, as the popular phrase goes, "there is not another bit of slate between that place and Ireland." If, then, the veins in Colonel Pennant's and Talsarn Quarries are identical, what has become of the full mile in breadth of slate veins north of Colonel Pennant's, it being universally admitted that there is no slate north of Talsarn? I can yet refer to another fact which, probably, to some minds may appear still more confirmatory of the views I have suggested. On the southern side of Nantlle Vale is a well-known but narrow vein of slate, called the Silk vein, of such peculiar colour and quality as to be easily recognised wherever seen. The colour is a marvellously bright red, and the surface smooth and silky. In only one quarry, that I am aware of, has this vein been driven through, so that in the majority of the quarries where it is found the Silk vein forms the southern boundary of the working, the rock being in most cases, near the surface, soft and unworkable. Now, this same Silk vein can be traced to Colonel Pennant's quarry, where it will be found, not on the south of the slate range, as at Nantlle, but on the north side of the Penrhyn Quarry, clearly evidencing to my mind the fact that the large body of slate at Pennant's and Smith's is not traceable in Nantlle Vale or we should have the geological paradox of the north becoming south and the south north.

I should feel much more pleasure in replying to the intelligent letter of "Tourist" if he had appended his name to it, that we might be upon equal terms in that respect. If I had time I should like to discuss all his objections to my report, and his observations on the quarries, in which he has taken so much interest as to make me inclined to doubt whether he is simply the casual "Tourist" he would have your readers believe.

The immediate contiguity of the slate veins in Talsarn to the boundary rock of the whole slate range will account for any excess of that profitless material, "dyke," to which other quarries, farther removed from the disturbance, are not likely to be so subject. It is eminently the quarry in direct contact with the felspathic rock for the greater part of its length, and has, therefore, received an over-allowing benefit from that connection. Depend upon it the dykes and

other rubbish always have been, and always will be, the obstacles to profit. The quarries should be worked in galleries in a totally different direction, and on a totally different principle, as a whole—like Pennant's and Smith's, and not in a multitude of holes. No quarry worked in holes can long succeed. The Dorothea, and all quarries so worked, though they may occasionally pay for a time, must come to an end. They are not things to endure, like the great quarries I have named. The workable slate rock supposed to have been seen by "Tourist" I have no doubt is simply the rock which could not be worked; hence appears the value of "Tourist's" judgment. There is plenty of visible rock left, but for the simple reason that it was hard, metamorphosed, and unworkable, and partakes of the character mentioned in my report.

"Tourist" refers to two quarries in the meadows. Does he know that one of them, "Cornwall," in the centre, was abandoned because of the hardness of the rock, and that the other was a mere trial, where, I understand, the rock appeared good, but the place was too contracted for anything? How are the meadows, a narrow slip of a few yards between the road and rubbish heap, to be worked, assuming, as I believe, there is some very good slate there? It is down to the water level, and must be worked by steam; and where is the ever-needed tip ground to be got? You cannot tip into the Dorothea or into the narrow road. There are many places in Wales where slates are to be found, but few, comparatively speaking, that possess all the requisites to ensure a paying quarry. There must be proper elevation, good rock, and plenty of it, and no end of tip room, without expensive steam-power, to ensure a good and permanent quarry. If "A Tourist" will lay down a plan of working these quarries, with details and cost, and computed returns, I will undertake to discuss the matter with him, but mere general assertions will not convince anyone accustomed to such particulars as I have suggested. He is of opinion "that the Talsarn Quarries will turn out well with the aid of a very moderate capital, and if these meadows are opened up in a proper manner the result must be highly profitable." If this kind of reasoning satisfies the writer it will not, I conceive, by its conclusiveness, satisfy any other person. What is turning "out well?" What is a moderate capital, and what is the meaning of being opened up in a proper manner, and why must the result be highly profitable? The data on which these assumptions are founded should be furnished by "A Tourist."

The letter of a "Sec.," who is merely *pro tem.*, will not require from me much notice. The gentlemen who put him forward should have been obliged for my correction of an anonymous statement, which was simply a libel upon them, for it cannot be supposed that the prospectus did not state all the favourable circumstances; and the paragraph asserted more than the prospectus, and also what was untrue.

The "profit" the directors intend to make "on their own capital" need not be very large to secure a handsome dividend, if their capital is to be measured by the subscriptions on the registered Articles of Association, to which one only of the directors subscribed, to the extent of five shares, and the "Sec. *pro tem.*" for one. At that time assuredly the faith of the directors was in a weakly condition. Fifteen shares only were subscribed for in the Articles of Association.

The "Sec." probably never saw a slate quarry. I recommend him to go to Wales, and make himself acquainted with the quarries under "Mr. Harvey's" management. He will, probably, then feel ashamed at having been used to propagate such silly statements, and return a wiser man. One of his own directors could have corrected him, for he had received in cash upwards of 30 per cent. on the original capital then paid in the Prince of Wales, and more than 60 per cent. in paid-up shares. I decline to trouble you at any length on this matter; I could not only contradict but disprove every material statement in the angry letter of this gentleman. I presume he "does" the anger as proxy as well as the letter writing, and thus confirms the fact so often admitted, that the presence of anger denotes the absence of argument. One amusing circumstance I must notice in conclusion, that, though he had not been invited to begin it, he indignantly declines further correspondence. I shall never disturb his dreams by recalling the fact of his existence; but I recommend him in future, if he ever again submits to be made "a cat's paw," to request that the original will be pleased to conceal his hand by the omission of all characteristic vulgarity.

King-street, Cheapside.

TALSARN QUARRIES, AND BRITISH SLATE COMPANY.

SIR,—I address you without the slightest interest for or against the concerns above named, solely desirous to protect really sound legitimate slate quarrying from those manifold devices so often used to cover failure ending in loss. The *Mining Journal* of March 2 contained Mr. Thomas Harvey's report on Old Talsarn Slate Quarries, and this day I find two letters in reply. Dismissing that signed "Tourist" as vague, aimless verbiage, without any practical knowledge, apparently written to puff the Carnarvon and Bangor Slate Company, formed to work these quarries, and divert attention from the real question at issue, I confine my notice to the letter of the secretary, which, if he really thinks Mr. Harvey's statement inaccurate, does little justice to the company or himself, and, if that report contains matter he cannot answer, is merely a diluted version of the old *Nisi Prius* jest, giving the brief of a counsel for the defendant—"We have no case in defence, but please to abuse the plaintiff's attorney." What Mr. Harvey or his companies may be of no consequence to any intending investor in Talsarn; still less so is the statement of the confidence of the directors. We have too often seen many concerns come to grief with directors equally confident up to the last moment. The real points to ascertain are:—

1. Are the quarries full of rubbish and water or not? What would be the cost of clearing and unwatering them to commence workings on a scale to make profits?

2. Is it or is it not true that the property contains no space for deposit of rubbish, so as to clear them?

If the secretary is strong in challenging Mr. Harvey to make good his allegations in both these issues, let him propose a meeting on the quarries, with an umpire of undoubted skill and impartiality, who, taking Mr. Harvey's report in one hand, and the prospectus in the other, hearing what both sides can say to make good their statements on the ground, could give a final verdict one way or the other.

I now turn to the British Slate Company. The *Journal* of this day notices their meeting on Thursday last, declaring their usual dividend of 9 per cent. I think, Mr. Editor, it is hardly fair to the public in the directors satisfying themselves, and it may be their shareholders, by merely making this simple statement, without giving us the usual details of their meeting. If they will not publish the whole of their report, perhaps they will allow their secretary to prepare a return of the slates made, their value, and the amount of profit realised. These particulars will be perused with much interest by parties interested in the slate trade. A MAN OF EXPERIENCE.

March 16.

SLATE QUARRIES.

SIR,—I observe that a pretty little discussion has very recently arisen in the *Journal*, in which are involved the names of Mr. Thomas Harvey (with I know not how many "manager" additions), Mr. T. T. Jennings, and "A Tourist." There is a little verse or two from Watts's Hymns which may occur to your readers as illustrative of this pretty little discussion. It would appear from advertisements in the *Journal* that Mr. Jennings wishes to form a new company, called "The Carnarvon and Bangor Slate Company," with a capital of 100,000*l.*, and that Mr. Harvey wishes to raise 15,000*l.* on mortgage debenture bonds for the Prince of Wales Slate Company, one of the quarries of which he is manager. Perhaps there is a little bone of contest in this, and that the public might not join in the old song of Capt. Macheath—

"How happy could I be with either,
Were I other dear charmer away."

But time will show; for I fancy that this pretty little discussion is not yet at an end, and more than this, that the public may not be so much in love with the "charms" of both. At least, I should infer that was the opinion of the controversialists, and a very wrong one, too, as it appears to me, because 115,000*l.* would not make the public a bankrupt. However, it may be that the public Macheath will fall in love with neither. There must, then, be some other reason for this pretty little discussion, and I fear it must be laid on Mr. Harvey's shoulders, as he appears to have been the aggressor. There is, however, I incline to think, a little substratum in this matter, which

Mr. Jennings only seems to hight at, but which will, probably, get a further elucidation by-and-by. From my everlasting hill I always overlooked the Vale of Nantlle, and perhaps I know more about Mr. Harvey's connection with the Talsarn Quarries than is contained in Mr. Jennings's statement, when he says that "when Mr. Harvey had this property a company was formed to purchase it from him for 40,000*l.*," &c.

You will see that my position necessarily gives me a perfect view of all the country near me, and it is well known that on a fine day I overlook even the present Fenian country of Ireland. I should like to speak to you sometimes about quarry matters which come within my province; and, as my head rises higher than any other in the Principality, you may feel sure that I shall speak fairly of all, and will use my best endeavours to be strictly impartial between Cwmraeg and Sassenach, as well as between the Investor and Speculator, the Promoter and Shareholder, the pure Slate Vein and the Bastard Rock. What a view I have of them all, as they are all constantly round about me!

SNOWDON.

WORKING NEW MINES, AND SMELTING THE ORES.

SIR,—I have just seen a letter in last week's *Journal*, in which some allusion is made to the Mona and Parys Mines, as having made greater profits than any other copper mines in Great Britain: this is quite true, and the writer might have said than any other copper mines in the world. Perhaps it may be interesting for some of your readers to know that the two mines from the commencement of their working gave profits to the enormous amount of 7,000,000*l.* sterling, about 4,000,000*l.* of which was made out of the Mona Mine, and 3,000,000*l.* from the Parys Mine.

The Mona Mine for many years was worked by the late Marquis of Anglesey, and until the last year was continued by the trustees of the present Marquis, it being now in the possession of three private gentlemen in the immediate neighbourhood. The Mona Mine proprietors smelted all their own ores for many years, purchasing also from the Parys and different other mines their ores, and this was not done without leaving a good profit to Lord Anglesey.

In or about the year 1830, the Parys Mine was very poor—in fact, losing about 6000*l.* per annum; in 1835, the mine, which was then said to be worked out, was taken up by a party of Welsh gentlemen, under the able management of Capt. C. B. Dyer, working at considerable expenditure for about nine years; they then cut the north Discovery lode, which, besides paying back their outlay, gave the fortunate adventurers about 240,000*l.* profit. Their lease being then up, it came into the hands of the Messrs. Taylor, about six years ago, who, on an outlay of 50*l.* per share, have already made a profit of 157*l.* 10*s.* per share. I think I have said enough to show that enormous quantities of copper have been found in Anglesey; but will it be believed that, in the face of all this, Anglesey has been almost entirely neglected by speculators! Although I know of many splendid lodes in the locality, in not one single instance has a shaft been sunk 30 fathoms to try it—in fact, the Mona and Parys lodes, east and west, are still entirely unworked.

A CORNISH MINER.

Anglesey, March 19.

REAL PROSPERITY IS BUT OF SLOW GROWTH:

HASTILY-OBTAINED WEALTH IS HAZARDOUS.

SIR,—Those gentlemen best acquainted with mining operations know well that it has taken years to develop some of the greatest, most extensive, and best-paying mines ever discovered in this country. Two, if not three, companies failed in the attempt to discover the great riches which were eventually discovered by the Duke of Devonshire in the Ecton Mountain Mines, in Staffordshire. The same may be said of the Pant-y-Go Mine, in Flintshire, and likewise that of the Mona Mine, in Anglesey. The Lisburne Mines, in Cardiganshire, were condemned by the agents of one of the greatest mining firms in Cornwall, the then proprietors of these subsequently rich mines. Two, if not three, attempts were made by some gentlemen in the grounds now comprising the Devon Great Consols Mining Company. And had the late Colonel Drake sunk the shaft he commenced some 4 or 5 fathoms deeper, the great mass of copper would have been discovered by that gentleman, which has since paid the proprietors one million sterling in dividends. The Great Wheal Towan would have been abandoned but for the last man, on leaving the bottom of the mine, by accident discovering a branch of copper, which led to immense profits in a few years. The first Great Wheal Vor was unproductive for about eight years; and the celebrated Tresavean Mine for about an equal period. These latter mines ranked amongst the greatest and richest mines in their day. In the Tamaya Mines, in Chili, it took 10 years to sink a shaft through hard ground—elvan or porphyry—before Mr. Urmeneta reached the deposit of ore now paying him enormously. But gentlemen speculating now-a-days expect a return immediately they embark their capital, hence mining has been neglected during the last three or four years, for Finance, Discount, Banking, and other companies, paying 20 to 40 per cent. as soon as many of these schemes were started; in fact, nothing goes down with the public but schemes originated but to gamble in the moment they are floated. I must admit that but few men can resist the temptation of embarking in any concern that will run up to pounds premium in a few weeks after it is launched; and hence so much misery of late. The oak takes time to grow; and to accomplish most, if not the greatest, events time is required, hence it is said that "good work requires time."

No doubt that mining, as a speculation or investment, if legitimately and fairly carried out, is as good and paying a speculation as most things men of capital can embark in; and money can still be employed in our empire to develop the hidden riches waiting its development. What has made this the richest and greatest commercial country on earth but the great wealth produced from our mines, which gives employment to such a multitude of every description of persons? And without the circulation of capital a country soon becomes impoverished; then want, misery, and every evil attending laziness, which is the result of the want of labour. To find employment for the people is the best and surest way to keep them honest and happy. It has been said that nothing is more honest than land, but then the land must have manure to make it yield a succession of crops to pay, and to open up mines to advantage there must be a beginning—capital and some patience—or but little good will be the result. Trade must and will improve as the season opens up—one extreme invariably follows another. No one connected with mines some 30 years ago ever dreamt of tin being above 50*l.* per ton, or lead above 10*l.* to 12*l.*—that is, at from 75 to 80 per cent. in the ore, and copper at a standard of 120 is quite high enough, which will keep foreign production from inundating the various markets of the world.

A CORNISHMAN.

THE FRONTINO AND BOLIVIA GOLD MINING COMPANY.

SIR,—The report in the *Mining Journal* of March 2, of the evidence given before Alderman Sir Robert W. Carden, on the summons being heard for refusing me an inspection of the register of members on three occasions, is not correct in many particulars. The company offered no evidence whatever, but admitted that on the 18th, 23d, and 25th ultimo I was refused an inspection, on the grounds that on the 18th the books were at the office of the accountant, Mr. Moates, on the 23d that I must give notice to inspect, and on the 25th that the books were only open for inspection between the hours of eleven and one o'clock. The 32d section of the Companies Act is really the only protection shareholders and the public have against limited liability companies. It enacts that "the register of members shall be kept at the registered office of the company; it shall during business hours—but subject to such reasonable restriction as the company in general meeting may fix, so that not less than two hours on each day be appointed for inspection—be open to the inspection of any member gratis, and to the inspection of any other person on payment of 1*s.*" The Legislature, to make this clause most effective, not only subjects the company to a penalty of 2*l.* a day, but also the directors, manager, or other official who knowingly refuses an inspection, to a like penalty. The company have not imposed any restriction in general meeting, therefore I maintain I had a right to see the register on the 18th and 25th, and, without doubt, on the 23d, as I applied at twelve o'clock. The Act empowers the Justices to lower the penalty, and, if the 32d clause is law, the judgment of Alderman Carden is the

Original Correspondence.

COAL MINES INSPECTION.

PROPOSED NEW GENERAL RULES BY INSPECTORS, AND INCREASED SAFETY IN COAL AND IRONSTONE MINES.

SIR,—Inspection of Coal Mines has now extended over a sufficient length of time to afford the required information to judge of its efficiency and usefulness. Recent serious explosions have excited great interest in the matter. Is the present system of inspection sufficient to give satisfaction to the public and to ensure the minimum of fatality? Is it desirable that it should be extended in any way?

All satisfactory inspection must be based on well-considered, well-defined, and strictly enforced general and special rules. Any other system would create confusion and disorder. The joint and separate reports of the Inspectors, in reply to the circular letter of the Secretary of State, dated Dec. 26, 1866, has now been printed. As is the case with doctors, so is it in the case of the Inspectors; they did not unanimously agree as to alterations in the general rules or increase of Inspectors, or in restricting the area worked by a pair of shafts. Other persons are justified in dissenting from the conclusions they come to. Probably further enquiry will, and possibly further legislation may, result. The propriety or these enquiries and legislation cannot be doubted. The awful loss of life in Staffordshire and Yorkshire in December last fully justifies it. What can be done to prevent the recurrence of such calamities? Has the application of scientific knowledge and practical experience, every known means of prevention, been fairly and fully tried, and lamentably failed, or have they been ignorantly, carelessly, or wilfully neglected? Are there any further precautions known and applicable, or are we to await with hopeless resignation a second edition of December's bills of mortality? We trust not. Every recurring fatality should, and we believe really does, increase the subsequent safety of coal mines. The working of coal mines has not yet reached the limits of further improvement. How important, then, it is to seek to derive from the painful lessons and experience of the past the utmost possible advantage for our future guidance.

Mining engineers, or colliery viewers (I rather prefer the time-honoured designation), no doubt do not over-estimate the value of recommendations coming from non-professionals. This is natural enough, and may not imply that they think themselves the possessors of superior natural, but rather of acquired, capabilities on the matter, the result of special training. It is as unlikely to find a landsman competent to the duties of a naval officer as to find inexperienced, untrained persons qualified to deal with the requirements, necessities, difficulties, and dangers of a coal mine. The scene of operations is completely hidden from ordinary observation in the depth and gloom of subterranean darkness. Few persons, not called by duty, venture there. A most salutary and proper feeling restrains them. The public generally, however, feeling a deep interest in the subject is one reason for the appointment of properly qualified Inspectors, who may by personal inspection satisfy themselves that all reasonable precautions are taken to ensure the safety of the workmen.

It is very satisfactory to find that the qualifications of the Inspectors hitherto appointed are not doubted either by professional men or the public, nor, I believe, by the workmen generally. All of them may not be the best mathematicians, the most scientific, practical, or experienced men that could be obtained; some of them are. They all have, at least, been trained to mining pursuits. They are just the class from which the persons are derived who are entrusted with the management of the most difficult mines of the country. Some persons are of opinion that, as is the case with some other matters, the appointments are very much affected by interested influence, and, indeed, I am aware that some of the most qualified persons have declined to make application for the appointment for that reason. Notwithstanding, whilst there have been murmurs of the appointment of untrained youth and inexperience, the general fitness of those appointed has not been questioned.

When for a lengthened period the statistics of the fatality in coal mines are collected, the results are no doubt startling. In the report of the Committee of the House of Commons, which examined a large number of witnesses last year, a statement prepared by Mr. Atkinson, Inspector for South Durham, is given, which shows that for the ten years, 1856 to 1865, both inclusive, the fatality in coal mines had during that period been very considerably reduced in proportion to the coal raised, as will be seen by the following summary:—

	Total number of deaths from accidents in and about coal mines.	Total number of tons of coal raised.	Tons of coal raised per life cost.
1856	1022	71,787,552	70,242
1857	1122	74,611,541	66,499*
1858	981	73,725,895	79,196
1859	965	78,275,957	80,496
1860	1105	82,602,792	74,538†
For five years, 1856 to 1860, inclusive	5089	381,067,047	74,880
1861	936	90,705,796	96,907
1862	1133	90,989,666	80,202‡
1863	907	92,819,855	102,337
1864	867	95,122,419	108,714
1865	984	98,911,169	100,519§
For five years, 1861 to 1865, inclusive	4827	468,548,905	97,068
For ten years, 1856 to 1865, inclusive	9916	849,615,952	85,880

* Lund Hill explosion occurred in 1857.

† Burradon, Hecton, and Risca explosions occurred in 1860.

‡ Hartley accident, by breaking of engine pumping-beam, occurred in 1862.

§ An explosion occurred in South Durham in 1865.

The average of the first five years gives one death to every 74,880 tons of coal raised. If the same rate of fatality had continued during the second five years, it would have amounted to 6257 deaths, whereas it was only 4827, or 1430 less during the latter than during the former period, in proportion to the tons of coal raised. Whether this diminution of fatality is entirely the result of inspection is very properly doubted. Education has been more widely extended. Information has been more widely diffused. The practice and improvements of the most advanced districts have become not only better known, but adopted by other districts, and more strict attention has been directed to enforcing the general and special rules. Officers do not relish appearing before a coroner's inquest, assisted by the practical knowledge of the Inspector, charged with not attending to and enforcing these rules. All these combined, together with the fact that the Inspector in most cases, and, indeed, in all cases of doubt, examines the place where a fatal accident has occurred, have no doubt caused increased attention to safety, and consequent reduced fatality since the beginning of inspection. It is, however, a question—and it is a pity that the statistics required are not to be found—of curious interest and importance, how far the improvement of the last 10 years has exceeded (if at all) that of the previous 40, in proportion to the coals raised. However this may be, my own conviction is that the improvement of the last 10 years is more due to the Inspection Act than the act of inspection; and that it is most desirable that inspection, independent of the occurrence of fatal accidents, might be beneficially extended.

What I should call pre-inspection would be a great relief and advantage to colliery owners and viewers. They would feel more satisfied that the due observance of the rules were generally and properly attended to, or if neglected, reported by an independent person. It would ensure greater watchfulness and care on the part of the officials, and would materially assist in maintaining strict discipline amongst the workmen in all matters relating to safety. It would help to make the safety of the persons employed in the mine what it ought to be—the primary object of attention both by the Inspectors, colliery owners, viewers, officials, and workmen, and would not only give satisfaction to the public and relatives of the sufferers, but to all parties concerned, when a single fatal accident or serious calamity occurred, to be assured there had been no want of care or attention to safety.

To effect this in a satisfactory manner is, without doubt, beyond the capabilities of the present staff of Inspectors. On an average they have (in addition to ironstone mines) 268 collieries each to attend to—some of them upwards of 500—and from 80 to 150 fatal accidents each per year to investigate, together with all their other duties of correspondence, framing rules, reporting to Government,

prosecuting delinquents, &c. In South Staffordshire and Worcestershire, and in South Wales, the Inspectors had, in 1865, 542 and 338 collieries to inspect, besides having (one of them at least) an average of nearly three fatal accidents per week to investigate and report on. During the same year, whilst the average fatality was one death for every 100,519 tons of coal raised in South Wales, it was one to 53,656 tons. It is curious to observe that from Durham southward, along the eastern range of the coal mining districts, the fatality progressively increases till we reach South Wales, it being in the former district, in 1865, one death to 172,944 tons, and in the latter one death to only 53,656 tons of coals raised; and the number of collieries under each Inspector is 161 and 338 respectively. Considering all the circumstances, I believe I am justified in stating that hitherto actual inspection prior to fatal accidents has contributed little or nothing to increased safety or reduced fatality, it being utterly impossible that it should be otherwise, the present staff of Inspectors being inadequate for the purpose; and that if inspection is to be extended, it can only be so by an increased number of Inspectors or sub-Inspectors.

The present Inspectors have duties enough to attend to—some of them too many. The number might be advantageously increased by appointing one more to each of the following districts—Yorkshire with 422, South Staffordshire and Worcestershire with 542, and South Wales with 338 collieries for one Inspector. This would reduce the number of collieries under each Inspector, on an average, to little more than 200. To give each of these one careful inspection with 15 Inspectors, instead of 12, as at present, and allowing one Inspector to visit, on an average, four collieries per week, would take each Inspector a whole year to visit each colliery once; and to visit each colliery once in three months, or four times a year, would require five times the present staff of Inspectors. Supposing each Inspector costs the country 800*l.* per year, and the number to be increased fivefold, or to 60 for the 3215 collieries in England, Scotland, and Wales, the cost would be 48,000*l.* per annum for a quarterly inspection of each colliery. This would be a serious cost. Is it necessary? Can such inspection not be as well, or better, effected by sub-Inspectors? Such sub-Inspectors to be men of not less standing than 10 years as underwriters. Suppose the Inspectors to be increased to 15, and each to have three sub-Inspectors under him, at a cost of (say) 400*l.* each per year, the annual cost would be 30,000*l.* instead of 48,000*l.*, or about one-fourteenth of 1*l.* per ton on the coal raised.

The duty of the sub-Inspector would be to visit collieries daily, and carefully examine how the general and special rules are attended to, and also to ascertain the general condition of the mine as to ventilation, &c. He might be required to enter in a book kept at the colliery his report as to the observance of the rules and the state of the mine as to safety, in addition to reporting to the Inspector of the district, whose duty, in addition to those already performed, would be to attend without delay to any cases of breach of rules, neglect, defective arrangements, or danger. I believe this would do more to improve the safety of coal mines than extending the present system, because the chief Inspectors' duties would remain as at present, and be supplemented by a personal examination of mines by the proposed sub-Inspectors. Nor would it in any way lessen the duties and responsibilities of the owners or their officers, but rather tend to increase them; nor would it increase the responsibility of Government, because it would involve no further interference with the management than the enforcement of the rules required.

I recommend this more effective inspection more particularly on account of its giving more general satisfaction than is at present felt. I do not anticipate any great diminution in the number of fatal accidents as the immediate result. For this reason, after upwards of twenty-four years practical and responsible experience as a colliery viewer, and from paying considerable attention to the question, it is my most decided conviction that (perhaps excepting fatality arising from serious explosions) any considerable reduction of fatality can only be effected by increased care on the part of the workmen themselves. This will be the work of time, and no doubt would be accelerated by the examinations and reports of the sub-Inspectors, as herein recommended.

It will be clearly seen that my own opinion is that the system of inspection, of whatever form, should be strictly based on the general and special rules, and limited to their enforcement. No other system could possibly give satisfaction. Were it in any degree based on the personal opinions of the Inspectors themselves, however well qualified they might be, it would be unsatisfactory. Differences of opinion amongst the Inspectors themselves would produce confusion, and the greater their number the greater would the confusion and discord become. Nor can it be expected that the opinions of colliery viewers would at all times harmonise with the Inspectors. These considerations give importance to the adoption of a fixed standard of rules and regulations, sanctioned by Act of Parliament, and equally binding on Inspectors, sub-Inspectors, colliery viewers, and officers and workmen; and if combined with the principle of individual responsibility for the due observance of the provisions of the rules, and the proper performance of the duties devolving on them, in the situation occupied, of whatever class, would, no doubt, be attended with beneficial results and ultimate reduction of fatality.

If the principle of basing the entire system of inspection on general and special rules, in contradistinction to that of the personal views and opinions of the Inspectors, be fully and generally admitted, the careful compilation of such rules becomes of vital importance. With such a guiding principle, and sub-Inspectors selected from the class referred to, I should not object—indeed, I should rather prefer—to have a sub-Inspector permanently on the colliery. Without such a principle inspection would become a source of perpetual anarchy, confusion, and strife, and would do more harm than good. Without a more extended and strict code of rules, and without more frequent, or, indeed, periodical inspection, cases of fatal accidents, especially those most lamentable and destructive explosions, will constantly produce dissatisfaction in the minds of the workmen and the public.

The alterations in the general rules—applicable to all mines—proposed by the Inspectors, having already appeared in the *Mining Journal* of the 2d inst., it is unnecessary to repeat them. I think a little alteration or classifying of them would make them more readily understood and remembered. For instance, those referring to the machinery—12, 11, 14, and 13, and those referring to the shafts 17, 4, 5, 7, 10, 9, and 6; and those referring to the interior arrangements of the mine, 1, 2, 3, 16, 15, and 8 would be better arranged in the order I here place them. In addition to the rules respecting the machinery, I would suggest the following:—Excepting persons having the charge of, or employed in working, cleaning, oiling, or inspecting engines, or machines, for raising coal, water, mineral, or persons, no person shall be allowed to enter the building containing them or remain therein whilst such are being worked, whether situated on the surface or within the mine. This would prevent the attention of the person responsible from being diverted, and increase the safety.

Rule No. 14 should be extended to all the revolving wheels of self-acting inclined and engine planes, whether on the surface or within the mine.

Rule 5 and 6 should both provide, "excepting when special repairs, or other special operations," &c.

Rule 7.—I would suggest it as being worthy of consideration, whether a uniform code of signals should be enforced by the general rules instead of by the special rules, such code to apply to all collieries and mines. The general rules, Nos. 12, 11, 14, and 13; and 17, 4, 5, 7, 10, 9, and 6, and 8 affect causes, producing nearly 40 per cent. of the fatal accidents which have occurred during the 10 years already referred to, as shown in the following table:—

	Five years, 1856 to 1860, no. of deaths.	Proportion per cent.	Five years, 1861 to 1865, no. of deaths.	Proportion per cent.
1.—Miscellaneous accidents in mines and above ground	967	19.00	2,234	22.55
2.—Shaft accidents	916	18.00	1,710	17.24
Miscellaneous and shafts 1863		37.00	3,944	39.77
3.—Falls of roof and coal	1922	37.75	3,953	39.87
4.—Explosions of fire-damp	1284	25.25	2,019	20.36
Total	5089	100.00	9,916	100.00

It will be seen that of the 12 general rules referring to the miscellaneous and shaft accidents, only one, No. 17, is a new one, Nos. 13, 5, and 9 being altered, whilst 12, 11, 14, 4, 7, 10, 6, and 8 remain as before. In carefully looking over these rules, and being convinced

how little they can be improved, it becomes increasingly evident in my mind that only increased care on the part of the workmen themselves can at all affect a large proportion of this class of accidents, if the above rules were generally enforced. Nearly another 40 per cent. of the fatal accidents of the last 10 years have been caused by falls of coal and roof, yet the Inspectors seem to have found it difficult or impossible to frame a general rule applicable to the case. Some persons are for laying the whole of the responsibility of this class of accidents on the owner or officials, whilst others consider that the workman himself is the most proper person to be held responsible for his own safety. Certainly they are the only persons who can be so, as it regards falls of coal, and in regard to supporting the roof they at least ought to be most responsible, as they are always present, and cannot be compelled to work where there is danger.

It must also be remembered that the condition of the place where the workman is actually engaged in removing the coal is constantly undergoing change, the result of his working. It is clear, then, that to inspect him, so as to take the entire responsibility from him and place it elsewhere, would require an Inspector to be constantly in attendance to watch over his safety. In considering this part of the subject, we ought to separate the falls of coal from the falls of stone or roof. Peculiarities in different beds of coal produce a decided influence on this class of fatality. For 1865, in South Durham district the fatality from falls of roof was 21, and only one from falls of coal, whilst in the Yorkshire district it was 10 and 12, and in South Staffordshire and Worcestershire district it was 13 and 35. Taking the first two districts named, the fatality by falls of stone was Durham one death to 675,306 tons, and Yorkshire one death to 930,000 tons, and for falls of coal it was Durham one death to 14,181,483 tons, and Yorkshire one death to 775,000 tons; whilst the death from falls of coal in South Staffordshire district was one to 291,471 tons of coal raised in 1865. It will thus be seen that in Yorkshire for the year 1865, where it is exclusively the collier's duty to secure himself from falls of stone, the fatality from this cause is much less, compared with the coals raised, than it is in Durham; whilst for the same year the fatality arising from falls of coal is nearly 20 times that arising from the same cause in Durham. I compare those two districts solely because in Yorkshire the colliers are themselves responsible for the efficient support of the roof, whilst in Durham this is attended to principally by a different class of persons—the deputies. I may observe, however, that comparing the fatality with the coal raised is not at all a uniformly applicable standard, because from a variety of causes, such as the thickness or the hardness of the bed of coal worked, whether the coal is worked by separation (part being left in the mine) or by altogether working (when more is left in the mine), the extent to which stone-pack walls are used to support the roof, the extent to which ponies are used in tramping and machinery in conveying the coal underground, all very considerably affect the number of persons required to raise a given quantity of coal, as will be seen by the following table for the year 1865:—

	Total quantity of coal raised, Tons.	Number of persons employed, per year.	Coal raised per person, tons.	Number per colliery, per year.
1.—South Durham	14,181,483	38,943	418	161
2.—North	10,409,900	25,035	416	165
3.—Sou. Staff., &c.	10,201,300	27,000	377	152
4.—West Scotland	6,490,000	18,375	348	223
5.—East Scotland	6,400,000	21,150	300	180
6.—West Lan., &c.	8,000,000	27,650	290	208
7.—South Wales	8,331,336	29,076	290	308
8.—Derbyshire, &c.	7,575,000	27,089	279	205
9.—North and East Lancashire	6,812,000	23,525	268	258
10.—North Staff., &c.	5,600,000	21,000	266	226
11.—Yorkshire	9,300,000	35,900	263	422
12.—Monmouth, &c.	6,000,000	26,658	225	226
Total	98,911,169	315,451	313	3215

Probably Mr. Brough could here point out where the hungry wolfing to which he refers in his report exists. The degree of safety on the tons of coal raised in each inspection district is as follows:—

	Tons of coal to one death in 1865.
1.—South Durham	172,944
2.—Yorkshire	169,091
3.—East Scotland	136,170
4.—West Scotland	118,518
5.—South Staffordshire, &c.	112,104
6.—North Staffordshire, &c.	107,092
7.—Northumberland, &c.	107,318
8.—North and East Lancashire	95,626
9.—Derbyshire, &c.	92,383
10.—Monmouthshire, &c.	73,120
11.—West Lancashire and North Wales	68,965
12.—South Wales	53,656
Average of the whole	100,519

The degree of safety calculated or based on the fatality to the number of persons employed is as follows:—

	Persons employed per life lost for 1865.
1.—Yorkshire	656
2.—East Scotland	450
3.—South Durham	414
4.—North Staffordshire	403
5.—North and East Lancashire	356
6.—West Scotland	340
7.—Northumberland, &c.	330
8.—Monmouthshire, &c.	326
9.—South Staffordshire, &c.	325
10.—Northumberland, &c.	258
11.—West Lancashire, &c.	258
12.—South Wales	182
Average of the whole	321

The number of collieries in each inspection district in 1865 is:—

	No. of collieries.
1.—South Staffordshire, &c.	542
2.—Yorkshire	422
3.—South Wales	338
4.—East Scotland	270
5.—North and East Lancashire	258
6.—North Staffordshire, &c.	225
7.—Monmouthshire, &c.	225
8.—West Scotland	223
9.—Derbyshire, &c.	205
10.—West Lancashire, &c.	180
11.—Northumberland, &c.	165
12.—South Durham	161
Average of the whole	268

The reason I have recommended one additional Inspector to the three following districts is—South Staffordshire, &c., the great number of collieries; Yorkshire, its liability to various explosions; and South Wales, its sad condition as to fatality.

Although for the ten years already referred to explosions have not caused more than about one-fifth (20.36 per cent.) of the total fatality in and about coal mines, and although probably half of such fatality has occurred in cases where only one person has suffered from any given explosion, still the very large number of persons who occasionally are killed by them does and always has caused them to be considered the worst class of fatality. For the four years, 1856 to 1860, inclusive, the total fatality from explosions was 1284, or 25.25 per cent., or one death for every 296,773 tons of coal raised. For the five years, 1861 to 1865, inclusive, it was 735, or 15.22 per cent., or one death for 637,481 tons raised. This shows an average diminution of fatality from this cause during this time. The data is defective, but some time ago I estimated the fatality over a longer period from this cause as follows:—

	Average of 1800 to 1815	1 death per 86,000 tons.
" 1815 to 1830	" 96,000 "	
" 1830 to 1845	" 275,000 "	
" 1845 to 1860	" 215,000 "	
" 1860 to 1865	" 296,773 "	
" 1865 to 1866	" 637,481 "	

This clearly shows a great diminution of fatality from this cause; indeed, I am most decidedly convinced, in my own mind, that this class of fatality has been more reduced than any other in proportion to the coal raised. The following is a calculation I made some time ago, which shows the deaths by accidents, from all causes, to coal raised from 1800 to 1863. It is no doubt very imperfect, but still an approximation:—

	Average of 1800 to 1815	1 death per 86,000 tons.
" 1815 to 1822	" 48,000 "	
" 1822 to 1835	" 60,000 "	
" 1835 to 1860	" 75,000 "	
" 1860 to 1863	" 102,337 "	
" 1863 to 1865	" 97,068 "	
" 1865	" 109,714 "	

From this it appears that whilst eight times the coal is now raised for one death by explosions which was raised from 1800 to 1815,

there is only two-and-a-half times the quantity raised to one death from all causes. There is not, nor can there be, the slightest doubt that more attention, and consequently more improvement and reduced fatality, has been given, effected, and produced in this department of coal mining, than in any other involving safety to life, during the present century. I believe the reason is equally clear that this being a matter which more particularly, or entirely, devolves on colliery viewers than any other cause of fatality, they have devoted themselves to it with a successful result; and no doubt they remain equally ready to continue their exertions to meet the expanding requirements of our constantly extending coal mines. All the most able viewers, from the justly celebrated John Buddle to the present day, have competed with each other to produce this effect—the reduction of fatality from explosions. Buddle estimated that in his time one-half of the entire fatality in coal mines was the result of explosions. For the ten years already referred to the fatality from all other causes has been 7897, which, according to Buddle's rule, would have made a total of 15,794, instead of what it actually has been, 9916—or 9916 from explosions, instead of 2019. COLLIERY VIEWER.

[To be continued in next week's Mining Journal.]

ON THE IDENTITY OF THE BANGOR AND NANTLLE VEINS OF SLATE.

SLATE QUARRYING IN WALES, BY "A TOURIST."—CARNARVON AND BANGOR SLATE COMPANY (LIMITED), BY THE SECRETARY.

SIR,—I am now about to adduce a few reasons for declining to accept the theory, often, I admit, adopted by superficial observers, that the veins of slate known as Colonel Pennant's and Assheton Smith's, are to be found in Nantlle Vale. There may be a fragmentary portion of these veins on the extreme southern edge of the slate range of that valley, as I shall presently show; but I believe it to be physically impossible that any of the so-called Bangor veins can traverse the northern side, or the centre of the valley. By "Bangor veins" I mean distinctly the veins passing through Colonel Pennant's and the late Mr. Assheton Smith's quarries. There are other veins which might with equal propriety be called "Bangor veins," to which I shall have occasion to refer; but the great point in question applies to those alone in the two celebrated quarries, between which, and many others, some identity is so often sought to be established.

Respecting the quality of the slate in these great quarries (for great they have become by comparison with all others, simply by effluxion of time, for at one period their produce was carried on horses' backs), there are wide-spread popular errors. Bangor slates, as they are called, or Dinorwic slates, are no better, in any respect, than the slates from many other quarries, and in one of those, at least, there is, probably, a larger amount of hard, coarse, and inferior rock than any other quarry produces. It is an entire mistake to suppose that for any excellence of character attributable to, or possessed by, slate, these quarries are superior in their produce to many others.

There is abundance of slate in Nantlle, which, for metal, split, and purity, is equal to the best ever produced in the Bangor quarries; and I have seen slates from another district which it would be difficult for either of those quarries to match, and impossible for them, in any respect, to surpass. Thus much, by the way, as to one popular error into which amateurs and "Tourists" are apt to fall.

To obtain a tolerable knowledge of slate veins, slate quarries, and slate quarrying requires much more time and earnest thought than most persons would imagine, or would be disposed to devote, or could devote, to the subject.

As to the identity of the Penrhyn and Dinorwic veins with those of Nantlle, I wish to take the reader, in imagination, with me, if he knows anything of the country, and the geology of the district; and I must ask him, at the same time, to exercise his phenological faculty, called "locality," while I place him on the summit of the hill opposite to the Llanberis lakes, and facing Assheton Smith's quarry; he will then easily perceive the continuity of the veins from Colonel Pennant's to the Dinorwic Quarry. There is, in fact, no question about the identity of the slate in these quarries. But a remarkable geological feat has been performed at the Llanberis lakes, where a great fault occurs. These lakes are reputed to be of great depth, and are, undoubtedly, without having recourse to wild traditions as to their being unfathomable, of a depth somewhat commensurate with the elevation of the mountain at whose feet they lie.

The slate veins have been apparently cut off at right angles by the lakes; at least, at that point they vanish from human sight, and dip, undoubtedly, to the bottom of the lake. The undulation of those veins eastward carries them from the lakes over the crest of the mountain to Colonel Pennant's Quarry, where another wave-like dip occurs towards Bethesda, and they are again lost in another fault. Westward from the Llanberis lakes they dip underneath the opposite hill, and re-appear, possibly, miles distant from the spot where they last slipped from sight. I shall, probably, at a future time indicate where they are next to be found, but they do not appear on the slope of the hill on the western side of the Llanberis lakes. Now, to prove that the veins I have been describing cannot be the veins seen in Nantlle Vale, I must request the reader to follow me in imagination to the northern side of Colonel Pennant's Quarry, and then in a line eastward for two or three miles. On the northern side of Colonel Pennant's Quarry will be found a large body of felspathic rock, with here and there a dash of greenstone (I am writing entirely from memory), and on the northern side of the felspathic and greenstone rock are veins of slate a mile or more in breadth, running parallel with the veins in Colonel Pennant's Quarry. If we proceed farther east, to the Royal Bangor Quarries, we get a full view of these gigantic veins of slate, including those of the last-named quarries, and extending for more than a mile in breadth towards Penrhyn Castle. Not one of these veins is to be found in Colonel Pennant's or Assheton Smith's quarries, but all lie contiguous to, and run parallel with them, on the northern side. These veins have not been submerged in the great fault at Llanberis lakes. They were too far north to be subjected to that amount of disruption or depression, though, probably, they were shifted a little eastward, and are the veins traceable all the way, at intervals, through Bettws Garmon and Moel Tryfan, on to Nantlle.

Another fact in support of this view seems to me wholly unanswerable. It is admitted that the northern boundary of the slate range in Nantlle is in the Talsarn Quarries, where the slate is impacted upon the felspathic rock; and, as the popular phrase goes, "there is not another bit of slate between that place and Ireland." If, then, the veins in Colonel Pennant's and Talsarn Quarries are identical, what has become of the full mile in breadth of slate veins north of Colonel Pennant's, it being universally admitted that there is no slate north of Talsarn? I can yet refer to another fact which, probably, to some minds may appear still more confirmatory of the views I have suggested. On the southern side of Nantlle Vale is a well-known but narrow vein of slate, called the Silk vein, of such peculiar colour and quality as to be easily recognised wherever seen. The colour is a marvellously bright red, and the surface smooth and silky. In only one quarry, that I am aware of, has this vein been driven through, so that in the majority of the quarries where it is found the Silk vein forms the southern boundary of the working, the rock being in most cases, near the surface, soft and unworkable. Now, this same Silk vein can be traced to Colonel Pennant's quarry, where it will be found, not on the south of the slate range, as at Nantlle, but on the north side of the Penrhyn Quarry, clearly evidencing to my mind the fact that the large body of slate at Pennant's and Smith's is not traceable in Nantlle Vale or we should have the geological paradox of the north becoming south and the south north.

I should feel much more pleasure in replying to the intelligent letter of "Tourist" if he had appended his name to it, that we might be upon equal terms in that respect. If I had time I should like to discuss all his objections to my report, and his observations on the quarries, in which he has taken so much interest as to make me inclined to doubt whether he is simply the casual "Tourist" he would have your readers believe.

The immediate contiguity of the slate veins in Talsarn to the boundary rock of the whole slate range will account for any excess of that profitless material, "dyke," to which other quarries, farther removed from the disturbance, are not likely to be so subject. It is eminently the quarry in direct contact with the felspathic rock for the greater part of its length, and has, therefore, received an over-riding benefit from that connection. Depend upon it the dykes and

other rubbish always have been, and always will be, the obstacles to profit. The quarries should be worked in galleries in a totally different direction, and on a totally different principle, as a whole—like Pennant's and Smith's, and not in a multitude of holes. No quarry worked in holes can long succeed. The Dorothea, and all quarries so worked, though they may occasionally pay for a time, must come to an end. They are not things to endure, like the great quarries I have named. The workable slate rock supposed to have been seen by "Tourist" I have no doubt is simply the rock which could not be worked; hence appears the value of "Tourist's" judgment. There is plenty of visible rock left, but for the simple reason that it was hard, metamorphosed, and unworkable, and partakes of the character mentioned in my report.

"Tourist" refers to two quarries in the meadows. Does he know that one of them, "Cornwall," in the centre, was abandoned because of the hardness of the rock, and that the other was a mere trial, where, I understand, the rock appeared good, but the place was too contracted for anything? How are the meadows, a narrow slip of a few yards between the road and rubbish heap, to be worked, assuming, as I believe, there is some very good slate there? It is down to the water level, and must be worked by steam; and where is the ever-needed tip ground to be got? You cannot tip into the Dorothea or into the narrow road. There are many places in Wales where slates are to be found, but few, comparatively speaking, that possess all the requisites to ensure a paying quarry. There must be proper elevation, good rock, and plenty of it, and no end of tip room, without expensive steam-power, to ensure a good and permanent quarry. If "A Tourist" will lay down a plan of working these quarries, with details and cost, and computed returns, I will undertake to discuss the matter with him, but mere general assertions will not convince anyone accustomed to such particulars as I have suggested. He is of opinion "that the Talsarn Quarries will turn out well with the aid of a very moderate capital, and if these meadows are opened up in a proper manner the result must be highly profitable." If this kind of reasoning satisfies the writer it will not, I conceive, by its conclusiveness, satisfy any other person. What is turning "out well"? What is a moderate capital, and what is the meaning of being opened up in a proper manner, and why must the result be highly profitable? The data on which these assumptions are founded should be furnished by "A Tourist."

The letter of a "Sec.," who is merely *pro tem.*, will not require from me much notice. The gentlemen who put him forward should have been obliged for my correction of an anonymous statement, which was simply a libel upon them, for it cannot be supposed that the prospectus did not state all the favourable circumstances; and the paragraph asserted more than the prospectus, and also what was untrue.

The "profit" the directors intend to make "on their own capital" need not be very large to secure a handsome dividend, if their capital is to be measured by the subscriptions on the registered Articles of Association, to which one only of the directors subscribed, to the extent of five shares, and the "Sec. *pro tem.*" for one. At that time assuredly the faith of the directors was in a weakly condition. Fifteen shares only were subscribed for in the Articles of Association.

The "Sec." probably never saw a slate quarry. I recommend him to go to Wales, and make himself acquainted with the quarries under "Mr. Harvey's" management. He will, probably, then feel ashamed at having been used to propagate such silly statements, and return a wiser man. One of his own directors could have corrected him, for he had received in cash upwards of 30 per cent. on the original capital then paid in the Prince of Wales, and more than 60 per cent. in paid-up shares. I decline to trouble you at any length on this matter; I could not only contradict but disprove every material statement in the angry letter of this gentleman. I presume he "does" the anger as proxy as well as the letter writing, and thus confirms the fact so often admitted, that the presence of anger denotes the absence of argument. One amusing circumstance I must notice in conclusion, that, though he had not been invited to begin it, he indignantly declines further correspondence. I shall never disturb his dreams by recalling the fact of his existence; but I recommend him in future, if he ever again submits to be made "a cat's paw," to request that the original will be pleased to conceal his hand by the omission of all characteristic vulgarity. THOMAS HARVEY.

King-street, Cheapside.

TALSARN QUARRIES, AND BRITISH SLATE COMPANY.

SIR,—I address you without the slightest interest for or against the concerns above named, solely desirous to protect really sound legitimate slate quarrying from those manifold devices so often used to cover failure ending in loss. The *Mining Journal* of March 2 contained Mr. Thomas Harvey's report on Old Talsarn Slate Quarries, and this day I find two letters in reply. Dismissing that signed "Tourist" as vague, aimless verbiage, without any practical knowledge, apparently written to puff the Carnarvon and Bangor Slate Company, formed to work these quarries, and divert attention from the real question at issue, I confine my notice to the letter of the secretary, which, if he really thinks Mr. Harvey's statement inaccurate, does little justice to the company or himself, and, if that report contains matter he cannot answer, is merely a diluted version of the old *Nisi Prius* jest, giving the brief of a counsel for the defendant—"We have no case in defence, but please to abuse the plaintiff's attorney." What Mr. Harvey or his companies may be of no consequence to any intending investor in Talsarn; still less so is the statement of the confidence of the directors. We have too often seen many concerns come to grief with directors equally confident up to the last moment. The real points to ascertain are:—

1. Are the quarries full of rubbish and water or not? What would be the cost of clearing and unwatering them to commence workings on a scale to make profits?

2. Is it or is it not true that the property contains no space for deposit of rubbish, so as to clear them?

If the secretary is strong in challenging Mr. Harvey to make good his allegations in both these issues, let him propose a meeting on the quarries, with an umpire of undoubted skill and impartiality, who, taking Mr. Harvey's report in one hand, and the prospectus in the other, hearing what both sides can say to make good their statements on the ground, could give a final verdict one way or the other.

I now turn to the British Slate Company. The *Journal* of this day notices their meeting on Thursday last, declaring their usual dividend of 9 per cent. I think, Mr. Editor, it is hardly fair to the public in the directors satisfying themselves, and it may be their shareholders, by merely making this simple statement, without giving us the usual details of their meeting. If they will not publish the whole of their report, perhaps they will allow their secretary to prepare a return of the slates made, their value, and the amount of profit realised. These particulars will be perused with much interest by parties interested in the slate trade. A MAN OF EXPERIENCE.

March 16.

SLATE QUARRIES.

SIR,—I observe that a pretty little discussion has very recently arisen in the *Journal*, in which are involved the names of Mr. Thomas Harvey (with I know not how many "manager" additions), Mr. T. T. Jennings, and "A Tourist." There is a little verse or two from Watts's Hymns which may occur to your readers as illustrative of this pretty little discussion. It would appear from advertisements in the *Journal* that Mr. Jennings wishes to form a new company, called "The Carnarvon and Bangor Slate Company," with a capital of 100,000*l.*, and that Mr. Harvey wishes to raise 15,000*l.* on mortgage debenture bonds for the Prince of Wales Slate Company, one of the quarries of which he is manager. Perhaps there is a little bone of contest in this, and that the public might not join in the old song of Capt. Macheath—

"How happy could I be with either,
Were't other dear charmer away."

But time will show; for I fancy that this pretty little discussion is not yet at an end, and more than this, that the public may not be so much in love with the "charms" of both. At least, I should infer that was the opinion of the controversialists, and a very wrong one, too, as it appears to me, because 115,000*l.* would not make the public a bankrupt. However, it may be that the public Macheath will fall in love with neither. There must, then, be some other reason for this pretty little discussion, and I fear it must be laid on Mr. Harvey's shoulders, as he appears to have been the aggressor. There is, however, I incline to think, a little substratum in this matter, which

Mr. Jennings only seems to hint at, but which will, probably, get a further elucidation by-and-by. From my everlasting hill I always overlooked the Vale of Nantlle, and perhaps I know more about Mr. Harvey's connection with the Talsarn Quarries than is contained in Mr. Jennings's statement, when he says that "when Mr. Harvey had this property a company was formed to purchase it from him for 40,000*l.*," &c.

You will see that my position necessarily gives me a perfect view of all the country near me, and it is well known that on a fine day I overlook even the present Fenian country of Ireland. I should like to speak to you sometimes about quarry matters which come within my province; and, as my head rises higher than any other in the Principality, you may feel sure that I shall speak fairly of all, and will use my best endeavours to be strictly impartial between Cwmraeg and Sassenach, as well as between the Investor and Speculator, the Promoter and Shareholder, the pure Slate Vein and the Bastard Rock. What a view I have of them all, as they are all constantly round about me! SNOWDON.

WORKING NEW MINES, AND SMELTING THE ORES.

SIR,—I have just seen a letter in last week's *Journal*, in which some allusion is made to the Mona and Parys Mines, as having made greater profits than any other copper mines in Great Britain: this is quite true, and the writer might have said than any other copper mines in the world. Perhaps it may be interesting for some of your readers to know that the two mines from the commencement of their working gave profits to the enormous amount of 7,000,000*l.* sterling, about 4,000,000*l.* of which was made out of the Mona Mine, and 3,000,000*l.* from the Parys Mine.

The Mona Mine for many years was worked by the late Marquis of Anglesey, and until the last year was continued by the trustees of the present Marquis, it being now in the possession of three private gentlemen in the immediate neighbourhood. The Mona Mine proprietors smelted all their own ores for many years, purchasing also from the Parys and different other mines their ores, and this was not done without leaving a good profit to Lord Anglesey.

In or about the year 1830, the Parys Mine was very poor—in fact, losing about 6000*l.* per annum; in 1835, the mine, which was then said to be worked out, was taken up by a party of Welsh gentlemen, under the able management of Capt. C. B. Dyer, working at considerable expenditure for about nine years; they then cut the north Discovery lode, which, besides paying back their outlay, gave the fortunate adventurers about 240,000*l.* profit. Their lease being then up, it came into the hands of the Messrs. Taylor, about six years ago, who, on an outlay of 50*l.* per share, have already made a profit of 157*l.* 10*s.* per share. I think I have said enough to show that enormous quantities of copper have been found in Anglesey; but will it be believed that, in the face of all this, Anglesey has been almost entirely neglected by speculators! Although I know of many splendid lodes in the locality, in not one single instance has a shaft been sunk 30 fathoms to try it—in fact, the Mona and Parys lodes, east and west, are still entirely unwrought. A CORNISH MINER.

Anglesey, March 19.

REAL PROSPERITY IS BUT OF SLOW GROWTH:

HASTILY-OBTAINED WEALTH IS HAZARDOUS.

SIR,—Those gentlemen best acquainted with mining operations know well that it has taken years to develop some of the greatest, most extensive, and best-paying mines ever discovered in this country. Two, if not three, companies failed in the attempt to discover the great riches which were eventually discovered by the Duke of Devonshire in the Ecton Mountain Mines, in Staffordshire. The same may be said of the Pant-y-Go Mine, in Flintshire, and likewise that of the Mona Mine, in Anglesey. The Lisburne Mines, in Cardiganshire, were condemned by the agents of one of the greatest mining firms in Cornwall, the then proprietors of these subsequently rich mines. Two, if not three, attempts were made by some gentlemen in the grounds now comprising the Devon Great Consols Mining Company. And had the late Colonel Drake sunk the shaft he commenced some 4 or 5 fathoms deeper, the great mass of copper would have been discovered by that gentleman, which has since paid the proprietors one million sterling in dividends. The Great Wheal Town would have been abandoned but for the last man, on leaving the bottom of the mine, by accident discovering a branch of copper, which led to immense profits in a few years. The first Great Wheal Town was unproductive for about eight years; and the celebrated Treavean Mine for about an equal period. These latter mines ranked amongst the greatest and richest mines in their day. In the Tamaya Mines, in Chili, it took 10 years to sink a shaft through hard ground—elvan or porphyry—before Mr. Urmeneta reached the deposit of ore now paying him enormously. But gentlemen speculating now-a-days expect a return immediately they embark their capital, hence mining has been neglected during the last three or four years, for Finance, Discount, Banking, and other companies, paying 20 to 40 per cent. as soon as many of these schemes were started; in fact, nothing goes down with the public but schemes originated but to gamble in the moment they are floated. I must admit that but few men can resist the temptation of embarking in any concern that will run up to pounds premium in a few weeks after it is launched; and hence so much misery of late. The oak takes time to grow; and to accomplish most, if not the greatest, events time is required, hence it is said that "good work requires time."

No doubt that mining, as a speculation or investment, if legitimately and fairly carried out, is as good and paying a speculation as most things men of capital can embark in; and money can still be employed in our empire to develop the hidden riches waiting its development. What has made this the richest and greatest commercial country on earth but the great wealth produced from our mines, which gives employment to such a multitude of every description of persons? And without the circulation of capital a country soon becomes impoverished; then want, misery, and every evil attending laziness, which is the result of the want of labour. To find employment for the people is the best and surest way to keep them honest and happy. It has been said that nothing is more honest than land, but then the land must have manure to make it yield a succession of crops to pay, and to open up mines to advantage there must be a beginning—capital and some patience—or but little good will be the result. Trade must and will improve as the season opens up—one extreme invariably follows another. No one connected with mines some 30 years ago ever dreamt of tin being above 50*l.* per ton, or lead above 10*l.* to 12*l.*—that is, at from 75 to 80 per cent. in the ore, and copper at a standard of 120 is quite high enough, which will keep foreign production from inundating the various markets of the world. A CORNISHMAN.

THE FRONTINO AND BOLIVIA GOLD MINING COMPANY.

SIR,—The report in the *Mining Journal* of March 2, of the evidence given before Alderman Sir Robert W. Carden, on the summons being heard for refusing me an inspection of the register of members on three occasions, is not correct in many particulars. The company offered no evidence whatever, but admitted that on the 18th, 23d, and 25th ultimo I was refused an inspection, on the grounds that on the 18th the books were at the office of the accountant, Mr. Moates, on the 23d that I must give notice to inspect, and on the 25th that the books were only open for inspection between the hours of eleven and one o'clock. The 32d section of the Companies Act is really the only protection shareholders and the public have against limited liability companies. It enacts that "the register of members shall be kept at the registered office of the company; it shall during business hours—but subject to such reasonable restriction as the company in general meeting may fix, so that not less than two hours on each day be appointed for inspection—be open to the inspection of any member gratis, and to the inspection of any other person on payment of 1*s.*" The Legislature, to make this clause most effective, not only subjects the company to a penalty of 2*l.* a day, but also the directors, manager, or other official who knowingly refuses an inspection, to a like penalty. The company have not imposed any restriction in general meeting, therefore I maintain I had a right to see the register on the 18th and 25th, and, without doubt, on the 23d, as I applied at twelve o'clock. The Act empowers the Justices to lower the penalty, and, if the 32d clause is law, the judgment of Alderman Carden is the

The CHAIRMAN said he was very much opposed to the publication of a meeting of what might be called the latest news, for effect. Sometimes they knew that telegrams which arrived just at the time of the meeting produced very often a suspicion that it was for the purpose of producing an effect. He had received several telegrams just about the time of their meetings, but had so far generally suppressed them, although informing the shareholders of their tenour after the meetings were over. But upon this occasion there was appended to the report of the agent that which was exceedingly important, and therefore, he was bound to read it to the shareholders. He repeated it with much satisfaction, and, for the first time, he had produced a very peculiar effect:—"Capt. Harris has just now come down from underground, and brought some splendid stones of tin from the 204 cross-cut. More particulars to-morrow. There were gentlemen present—and among them Messrs. Peter Watson and Edward Cooke—who would at once see the importance of that announcement. In this circumstance, I should like to give you the opportunity of asking him to report the report of the committee. He hoped he would not be so exasperated about that improvement, because they all knew very well that it often happened that that which they had sometimes looked upon as a matter of certainty did not turn out to be so, but looking at the dead ground gone through, and the live ground now coming in, he thought there was every prospect of their success improving, and that very considerably, and in a short time. It would be a pity if they did not take advantage of the fact that they were now in a good class position as a surveyor in Cornwall, and shareholders would be able to see at once of the divergence and variations in the size of the lodes. It showed the Metal shaft, where that extraordinary piece of ground came in, and where we discovered a copper lode, but the copper was now wearing out—they never discovered any faith in it for copper—and it was now fast coming into a good line of metal, and instead of being a waste, and very little good being obtained from it, Mr. Henderson wrote him that morning that it ought soon to be seen, and the lode was as good as the 133, it would, of course, at once add considerable value to the mine—those were bright prospects for the future. (Hear, hear.) It did not hide from the shareholders at the last meeting that the mine was a very poor one and that they were then trenching upon their reserves, although they had the consolation to know that their reserves were very large. He trusted they would last until such time that before they were exhausted other discoveries would be made. Those discoveries were coming in earlier than expected, and, therefore, they had the comforting knowledge that the reserves were all being spared, that west of Ivey's shaft, as well as west of Metal, the better prospects were being spared, and that the ends and winzes were rapidly improving. (Hear, hear.)

ore ground was passed through by some former miners, for a length of 160 fms., and a good deal of rich copper ore taken away in places. Nothing further has been done, as the present company cut their proceedings short, but lost sight of what they were about, as they extended the same adit vigorously in a westward direction, and sunk a shaft to intersect it, and having discovered rich bunches of ore in the centre of the sett, they were carried away by the more lucrative discoveries still further west again, in connection with Sortridge, so that this shaft was not connected with the main adit, on recurring to it, they unfortunately found that the first shaft sunk, called Murdock's, after it was connected with the adit, was sunk 32 fathoms below it, and that it had a powerful water-wheel connected to it, and had all its pumps in excellent order to sink deeper if required. They found no levels driven from it into this eastern ground, except the bottom one, which Capt. Godden has recently extended about 30 fms.

BRITISH MINES.

EAST PROVIDENCE.—J. Nancarrow, W. White, March 20: We are making fair progress in the sinking of Boorman's shaft. The lode in the 94 fm. level

GWYDYR PARK.—Wm. Smyth, March 19: There is no change to notice in Gwyn Lliffon north end since last reported. The western end is also without change, the lode being still small.

vering a good course of tin in sinking. The lode in the rise in the back of the 74 west is $2\frac{1}{2}$ feet wide, composed of prlan, quartz, and good stones of tin; as soon as this is communicated with the 64 it will ventilate the eastern part of

There were in store at Sydney 12½ tons of fine copper, 4 tons on the road, and 12 tons nearly completed at the works. Ore on hand, 35 tons; wood, 1503 tons.

ST. JOHN DEL REY.—The produce for the month of January is 50,549 oits. nett, which at 7s. 9d. per oit., was worth 19,626l. 9s. 9d.; and the total cost was 10,722l. 3s. 1d., leaving a profit for the month of 8904l. 6s. 8d. The produce of the stamps for the first division of February, being a period of ten days, amounts to 15,153 oits.

DON PEDRO NORTH DEL REY GOLD.—Capt. Thos. Treloar reports—The gold return for January amounts to 7026 oits. (810 ozs. troy). Cost and profit: Produce, 7026 oits., at 8s. 6d. per oit., 2986l. 1s.; cost (Brazil and England), 1866l. 1s. 7d.; profit, 1119l. 19s. 4d. In Jan., 1866, we had a loss of 1685l. 14s. 9d., whereas in Jan., 1867, we had a profit of 1119l. 19s. 4d.

ANGLO-BRAZILIAN GOLD.—Capt. Thos. Treloar reports—The produce for January amounts to 4458 oits. (514 ozs. troy) of gold, which is 80 oits. under that for December, which is, however, easily explained. The stone stamped in December amounted to 1429 tons, whereas in the present month but 12½ tons were treated, owing to the less speed of the Victoria, and to stamping deeper in the cover, in the hope of obtaining a larger yield per ton. By the report it is seen that 1767 tons have been treated, but of this quantity 505 tons consisted of rubbish and killas, put in the north side of the Victoria, for the purpose of seasoning the cover beds. The yield of the Buraco Seco stove, in Hesketh's stamps, is comparatively good. Produce and cost: Produce, 4458 oits., at 9s., 2006l. 2s.; cost (in England and Brazil), 1706l. 12s. 4d.; profit, 299l. 9s. 8d.

ROSSA GRANDE GOLD.—The directors have received advices per steamer Guilleme, via Bordeaux, announcing the complete and legal transfer of the Rossa Grande estates to the company. Notarial documents confirming the same accompanying the advices.

The SELECT COMMITTEE ON MINES of last session, which was re-appointed on Thursday week by the House of Commons, on the motion of Mr. Ayrton, M.P., met on Tuesday "to choose a Chairman, and to decide upon the course of procedure." The choice fell upon Mr. Neate, M.P. for Oxford, who, it will be remembered, acted as Chairman last year; and it was understood that further evidence would be taken prior to the consideration of the report. The Committee then adjourned until Tuesday next.

MACHINE VENTILATION.—Since the agency for Great Britain for Lemelle's ventilating fan has been undertaken by Mr. Ellis Lever, of Manchester, much has been done to secure a recognition of its advantages, and it is now being received with great favour in this country. Mr. Willis, the viewer of the Washington Collieries, in the Durham district, has recently visited the Continent, for the express purpose of seeing the more approved ventilators in actual use, and judging of their respective merits, before deciding upon one for the Washington Collieries. The result of his inspection is, that he has ordered a Lemelle fan, which will be at once erected.

THE TIN TRADE.—The general prospects of the tin trade are decidedly more favourable than for some time past. On Tuesday the smelters announced an advance of 4l. per ton in the tin standards, and the price of the metal has advanced 2l. per ton. It is estimated that the consumption of foreign tin during 1866 was 4500 tons, against 3000 in 1865, 2000 the previous two years, and 950 in 1861. This large increase is owing to the expansion of the tin-plate trade, no less than 2,000,000 boxes of plates having been turned out during the year 1866, which alone would consume upwards of 7000 tons of tin in their manufacture. Adventurers in tin mines are enormously benefited by this improvement, the difference being sufficient to replace many mines in the Dividend List which for some time past have yielded no profit. By a reference to the Board of Trade returns, which have already been commented upon in the *Mining Journal*, it will be seen that the actual returns for the year ending December last show the enormous quantity of tin-plates exported last year to foreign countries, which amounted to within a fraction of the vast sum of 1,900,000l., which is an excess of nearly 500,000l. beyond the year previous, 1865. Out of this quantity the United States of America took somewhat over 1,400,000l. worth! In the article of unwrought tin—blocks, bars, and ingots—the French markets last years cleared off from England 120,013l., against 106,358l. for the year 1865. On comparing these figures it will at once be seen that this branch of industry is increasing in every respect.

ROYAL COPPER MINES OF COBRE.—It was recently mentioned that the produce of these mines for January was 813 tons. By the latest accounts the directors are informed that the returns from the mines will be sufficient to meet the current working expenses on the reduced scale of operations on which the works are now carried on, so as to enable the directors to retain their right of possession of the property until a decision has been given in the suit with the railway company, or satisfactory terms made with them, as unless that takes place no explorations or other works will be undertaken. The newspapers in Cuba strongly commend the line of policy adopted by the directors, and urge upon the railway company the propriety of conceding to the reasonable demands made to them, lest by continuing their present course they destroy the chief source of their wealth. They also call upon the Government to exert its influence to effect a speedy settlement of the question. They likewise advocate the remission or reduction of the various duties imposed on mining supplies and machinery, on the ground that everything in reason should be done to support a company which has for more than 30 years contributed so materially to the prosperity of the district in which its works have been carried on. It is to be hoped that the Government of Cuba will look upon the matter in the same light, and that they will grant the assistance for which they are now asked.

CHONTALES.—The following is an extract of advices per last mail. —The directors of the Chontales Gold and Silver Mining Company have received, per Douro, 27½ ozs. of gold. The water-power at present is low, and efficient machinery is expected to be in running order by the next wet season. The revolutionary movement is entirely suppressed, and as many natives as required have returned to the mines. The works are progressing favourably, and the general prospects are satisfactory.

GREAT WHEAL VOR.—Information was received from the agents the day after the meeting to the following effect:—"I am glad to inform you that the lode in the 204 is 6 inches wide, increasing in size driving east, and the two branches coming fast together."

GREAT NORTH LAXEY.—The very satisfactory result of the general meeting last week, and the good prospects of the mine, have had the effect of bringing a good many buyers of shares into the market, the price having also risen from about 20s. to about 30s. per share, an advance of 10s. The shaft is down 4 fms. below the 84, and when the next level is reached, the value of the mine will, no doubt, be still further confirmed.

CARNARVONSHIRE CONSOLS.—An extraordinary general meeting of shareholders (convened by requisition) was held yesterday at the London Tavern. A protest against the meeting was handed to the Chairman (Mr. Henry Milford), on behalf of the committee of directors, by the secretary *pro tem*, but a series of resolutions, removing some of the directors and appointing others, was unanimously passed. These resolutions appear in another column, and the details of the meeting will appear in next week's *Journal*.

COAL MARKET.—The arrivals this week have been large (116 ships), which led to a reduction in the price of house coals, and we quote 1s. to 1s. 6d. per ton lower than this day week. Hartleys have remained steady at previous value. Hetton Wallsend 22s. 6d., Haswell Wallsend 22s., South Hetton Wallsend 22s., Braddell's Wallsend 21s., Gosforth Wallsend 19s., Harton Wallsend 19s., Hetton Lyons Wallsend 19s., West Hartley 17s.

CONTRACTS FOR COAL.—The Admiralty require the supply of 5000 tons of South Wales Coal, to be delivered at Bermuda; also 1000 tons of South Wales Coal, to be delivered at Barbadoes.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in February was 611,467 tons, against 552,959 tons in the corresponding month of 1866, showing an increase of 58,508 tons. The particulars are—From the Northern ports, 302,005 tons; Yorkshire, 18,367 tons; London, 3356 tons; Liverpool, 50,732 tons; Severn ports, 193,283 tons; and Scotch, 43,724 tons. The increase was—Northern ports, 82,944 tons; Yorkshire, 1970 tons; Scotch ports, 761 tons. The decrease—London, 8733 tons; Liverpool, 8622 tons; Severn ports, 9812 tons. Total, Jan. and Feb., 1,127,027 tons; same time last year, 1,090,864 tons.

MANCHESTER GEOLOGICAL SOCIETY.—On Tuesday, Mr. J. Atherton will read a paper reviewing the existing methods of Extinctioning Fires in Coal Mines, and a new method suggested for consideration of the meeting.

With this week's *Journal* we give a SUPPLEMENTAL SHEET, in which is published—Prof. Warrington Smyth's Lectures at the Royal School of Mines; on the Duration of our Coal Fields, by Mr. E. W. Binney, F.R.S.; Lists of Blast-Furnaces in South Staffordshire and East Worcestershire, and in Scotland; the Cannon King-Krupp; the Great North Laxey Mining Company; Improved Inventions; Mineral Wealth of the Pacific, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MARCH 22, 1867.

COPPER.			IRON.			Per ton.
Best selected..p. ton	82	0 0-83 0 0	Bars Welsh, in London	6	10	0-6 15 0
Tough cake and tile	87	0 0-81 0 0	Ditto, to arrive	6	10	0-6 15 0
Sheeting & sheets.	84	0 0-—	Nail rods	7	0	0-8 0 0
Boils	88	0 0-—	Staf. in London	7	15	0-8 10 0
Bottoms	90	0 0-—	Bars ditto	7	15	0-9 10 0
Old (Exchange)	72	0 0-—	Hoops ditto	8	15	0-9 15 0
Burra Burra	83	10 0-84 0 0	Sheets, single	9	10	0-11 0 0
Wire	per lb.	0 1 0½	Pig No. 1, in Wales	4	5	0-4 10 0
Tubes	per lb.	0 1 0	Refined metal, ditto.	4	0	0-5 0 0
BRASS.			Bars, common ditto	5	15	0-6 0 0
Sheets	per lb.	10d.-11d.	Do. mach. Tyneor Tees	6	10	0-6 15 0
Wire	per lb.	8½d.-9d.	Do., railway, in Wales	5	15	0-6 0 0
Tubes	per lb.	11d.-12d.	Do., Swed. in London	10	0	0-10 10 0
Yellow Metal Sheath..p. lb.	7½d.-8d.	—	To arrive	10	0	0-10 10 0
Sheets	per lb.	7 d.-7½d.	Pig No. 1, in Clyde	2	14	0-3 6 0
SPELTER.			Do. f.o.b. Tyneor Tees	2	9	0-3 6 0
Foreign on the spot	21	15 0	Do. No. 2, f.o.b. do.	2	6	0-2 7 0
" to arrive	22	0 0	Railway chairs	5	10	0-5 15 0
ZINC.			spikes	11	0	0-12 0 0
In sheets	28	0 0	Indian Charcoal Pigs,			
TIN.			in London p. ton.	7	0	0-7 10 0
English blocks	92	0 0	STEEL.			Per ton.
Do., bars (in barrels)	93	0 0	Swed., in kegs (rolled)	14	0	0-14 10 0
Do., refined	95	0 0	Ditto, (hammered)	16	0	0-16 10 0
Banca	£93 10 0-94 0 0		Ditto, in faggots	16	10	0-17 10 0
Straits	88 10 0-89 0 0		English, spring	19	0	0-23 0 0
TIN-PLATES.*			QUICKSILVER (p. bottle)	6	17	0-6 18 0
IC Charcoal, 1st qua.	1	10 0-1 12 0	LEAD.			Per ton.
IX Ditto, 1st quality	1	16 0-1 18 0	English Pig, com.	19	10	0-19 15 0
IC Ditto, 2d quality.	1	6 0-1 8 0	Ditto, L.B.	19	15	0-20 0 0
IX Ditto, 2d quality.	1	12 0-1 14 0	Ditto, W.B.	22	5	0-23 0 0
IC Coke	1	4 6-1 5 0	Ditto, ordinary soft	20	0	0-20 10 0
IX Ditto	1	10 6-1 11 0	Ditto, sheet	20	5	0-21 0 0
Canada plates, p. ton	13	10 0-14 0 0	Ditto, red lead	21	5	0-22 0 0
Ditto, at works	12	10 0-13 0 0	Ditto, white	27	0	0-30 0 0
			Ditto, patent shot	23	0	0-24 0 0
			Spanish	19	0	0-20 0 0

* At the works, 1s. to 1s. 6d. per box less.

† A Derbyshire quotation: not generally known in the London market.

REMARKS.—Although the Metal Market is far from being in a satisfactory condition, yet there has been rather more business done during the past week, orders have been more abundant, and altogether there is a more hopeful appearance in the market, and a better prospect of a return to activity and vigour; and there now seems good reason to hope that as the spring advances we shall find a much more favourable state arising in the metal trade. It is very satisfactory to find that the new American Tariff Bill has been thrown out by Congress, although the reasons for its rejection appear to be, not objection to the measure itself, but because representatives of several States could not obtain that protection which they desired. We may, therefore, anticipate that ere long a similar measure may be again introduced. For the present, however, it is at an end, and our exports to the United States will not yet be subjected to those high protective duties which, in some instances, would be almost prohibitory. We trust, therefore, that the usual activity which prevails in commercial operations with America may be continued for some time to come. It is also satisfactory to observe that the orders from India are becoming much more abundant, and transactions are of a more satisfactory character than they have been for some time past. It is earnestly to be hoped that this state of things may continue and increase, until we again arrive at our former prosperous condition of business operations with India. The continued easiness of the Money Market will be found very advantageous as soon as a more decided state of activity arises in the metal trade, and parties who are desirous of entering into speculative transactions will find great facilities open to them, which will enable them to operate with every prospect of success.

COPPER.—The market for this metal continues very dull and lifeless, and prices are very uncertain, parcels in second hands being obtainable much under the prices asked by smelters. Advices from Chili, received during the week, report charters for 2000 tons of copper to England, which is calculated still further to depress the market. Chili slab has been sold at 72l.

YELLOW METAL.—On Wednesday an official reduction of ½d. per lb. was announced by the smelters, making the present price 8½d. per lb.; this will not, however, have any effect upon the market, as for some time business has been done much under the official quotation.

IRON.—In Staffordshire the trade does not manifest any improvement. The home demand usually declines towards the end of the quarter, and the orders being closely worked up, any falling off is at once felt. The American demand is at present slack, but India is now taking a fair amount of iron. In Welsh there is a tolerably fair demand for railway iron, and several considerable orders for rails are now in course of execution. The announcement of the rejection of the American Tariff Bill has been received with surprise, and it is to be hoped that the result will be a continuance of the activity which has prevailed during the last two months. Home business is slack, the greatest caution being exercised on all sides. The stoppage of so many iron shipbuilding yards has very much brought down the demand for plates, and there is a total absence of any animation in this branch of the trade. There are but few transactions entered into for bar-iron, and the prices realised are, as a rule, quite unremunerative. In the demand for pig-iron there is no material change to note, makers in many instances finding it difficult to sell the whole of their make. At one establishment a number of men are still out, in consequence of a dispute respecting the proposed reduction in wages. In Swedish iron a fair amount of business is still doing. In Scotch pig-iron the market has been more than usually depressed, and the anxiety to sell at one time amounted almost to a panic. The price has continued to decline, the last quotation received from Glasgow being 51s. 6d. cash.

LEAD.—The market continues very inactive; prices, however, have not undergone any alteration.

TIN.—The activity lately apparent in this market has not continued, and transactions are not so extensive as they have been, still prices continue steady, and business in Straits is done at 88l. 10s. to 89l. cash. In English an advance of 2l. per ton was announced by the smelters on Tuesday, making present prices 92l. for blocks, 93l. for bars, and 95l. for refined. The public sale of Banca tin in Holland will take place, as formerly announced in the *Mining Journal*, at Amsterdam, on the 28th instant, and will comprise 69,400 slabs of Banca, and 567 slabs of Billiton. No further public sale will take place before the autumn.

SPELTER has been inactive during the week, and sales on the spot have taken place at 21l. 15s., which may be considered the quotation.

TIN-PLATES.—The trade is in a fairly satisfactory state, and remunerative prices are now obtained.

STEEL and **QUICKSILVER** as formerly.

BIRMINGHAM, MARCH 22.—Bylands' "Iron Trade Circular" says—Pigs quiet; trade heavy. Manufactured iron of lighter qualities slightly improved. Hoops and sheets moving to orders from Canada, America, and Russia. Weather and politics press down the market.

The transactions in public securities on the Stock Exchange, it is said by the daily papers, are now "reduced to the lowest possible limit, through the disinclination of the public to purchase." And when we consider the enormous premiums to which many worthless schemes were got up during the new company mania, and which afterwards had to succumb to the influence of the "bears," and other causes, to the ruin of many of the unfortunate shareholders, the present state of things in the general market is scarcely to be wondered at. As a contrast to all, however, the MINING SHARE MARKET has been particularly active this week, and a very large amount of busi-

ness has been transacted in various mines, both dividend and progressive. Indeed, it is daily becoming more apparent that the public, disgusted with railway and other stocks and shares, are investing largely in good mines; and as mining companies, generally, are in limited numbers of shares, and particular demand for them creates a corresponding rise in their marketable value. Much of this increased demand for mines, we believe, has been owing to the great success of the Prince of Wales Mine, verifying what we frequently remarked during the depression that hung over the market for so long a time—that only one or two good discoveries were wanted to change its appearance of gloom into brightness and success. There is another advance of 4l. per ton in the standard for tin, making a rise in little more than a week of 3l. 12s. 6d. per ton on ore. The copper standard is lower this week. West Chiverton shares have been more dealt in, at 59 to 61. Chiverton Moor shares advanced to 9, buyers, and then declined to 7½; lode not yet cut. Great Wheal Vor shares have risen to 21, 22; at the meeting a dividend of 7s. 6d. per share was declared. The balance in favour of the company was 5093l. 5s. 5d., and, after payment of dividend, there remains in hand 2877l. 15s. 5d. The mine is reported to be looking better than for a long time past, particularly in the bottom, which is opening out well, and there is a discovery in the 204. Chontales, 2½ to 3; about 200 ozs. of gold have arrived, and the reports are satisfactory.

Prince of Wales shares have been very firm, and in demand all the week, and, without any of the usual fluctuations, leave off 55s. to 57s. 6d. No change has taken place in the mine since last report, except that the 45 east shows every appearance of an early improvement. Clifford Amalgamated, 6½ to 7½; Cook's Kitchen, 12 to 13; Drake Walls, 12s. 6d. to 15s.; East Basset, 20 to 22. East Grenvilles are firmer, at 2½ to 2½; an improvement has taken place in the mine, which ought, if it continues, to double their value. In the bottom of the 95 west a lode has been gone over 3 fms. in length, worth, according to the assay of the ore, 100l. per fm.; and in a rise above the 95 the lode is worth 3 tons per fm. of the same rich quality ore. Wheal Grenvilles have been more dealt in, at 20s. to 25s. In the cross-cut north in the 90, the agent reports he has cut into a lode 1 foot wide, no north wall reached, and has broken good tin from it. Great Retallack, 3 to 3½; the engine-shaft is now down 6 fms. towards the next level, were a good course of ore is expected. In the shaft the lode is 2 feet wide, consisting of friable quartz, gossan, and good stones of lead. The shaft is draining one of the winzes, which looks well. The adit end south has occasional stones of lead in a good channel of ground. East Caradon, 5 to 5½; East Carn Bren, 2½ to 3; East Lovell, 10 to 11; East Russell, 3½ to 3½; Great Laxey, 16½ to 17½. Great North Laxey have improved since the meeting to 25s., 30s. Marke Valley, 4 to 4½; North Crofty, 3½ to 6; North Treskerby, 2½ to 2½; Prosper United, 3½ to 3½. Minera, 170 to 180; at the meeting a dividend of 3l. 5s. was declared. The mine has improved through the connection of a deep level, and the intersection of a new lode, both of which may add to the returns. Providence Mines have advanced to 32½ to 35; Redmoor, 8s. to 10s.; Rosewall Hill and Ransom, 35s. to 40s.; South Frances, 17 to 19.

At Wheal Trelawny meeting a dividend of 5s. per share was declared; the credit balance was 1754l. Tincroft, 15 to 16; West Caradon, 9 to 10; West Drake Walls, 7s. 6d. to 10s.; Wheal Basset, 64 to 66. Wheal Buller shares have advanced to 22½, 24. Wheal Chiverton, 7 to 7½; Wheal Mary Ann, 13 to 14; Wheal Seton, 10½ to 10½; Wheal Uny, 37s. 6d. to 42s. 6d. Devon Great Consols, 400 to 420; at the directors' meeting, held this day, a dividend of 6l. per share (6144l.) was declared, leaving 11,137l. 6s. in hand, an increase of nearly 2000l. upon the balance in hand after payment of the previous dividend. The report of the mine is very good, the various points in operation being worth in the aggregate nearly 400l. per fathom. Great North Downs, 4 to 4½; in sinking Sleggan's shaft below the 70 a slide has been intersected, and the lode disordered, now worth 40l. per fathom for length of shaft; under the slide a fine course of ore is coming in. At Butler's shaft, 130 fathoms west of Sleggan's, in the 60, the cross-cut end is now entering into the ore-bearing part of the lode, and the agent thinks he shall be able to give the value of the discovery in a few days. South Condurrow, 4 to 4½; the improvement at the mine continues good, and the winze sinking below the 40 is valued at 30l. per fathom. The 50 end is within 2 fathoms of coming under the winze. At Gawnon Copper, the copper lode in the 60 west will produce 4 tons per fathom; the 50 east, 5 tons; and the 60 fm. level, 5 tons. The winze below the 50 fm. level, 5 tons; the 50 west, 6 to 7 tons. The engine-shaft is down nearly 8 fathoms below the 60. North Wheal Chiverton has been newly constituted, and brought out in 3000 shares of 4l. each. The reports from various agents, including those of West Chiverton, Great Laxey, and Trelawny, are of a very favourable character, and leave little doubt the mine will prove a success. West Prince of Wales, 10s. to 12s. 6d., and the applications for shares very numerous.

There has been rather a large business done in Mine Shares on the Stock Exchange during the week. Chiverton Moor shares have fallen from 8½ to 7½; the ends are not looking so well as for some time past, and the rise in the back of the 50 fathom level has fallen off, but the changes are only of that character that all mineral lodes are subject to, and there is nothing in the changes to frighten shareholders, or to affect permanently the position of the mine. The prospects are really of a high order, and shares would appear to be deserving of attention at the present quotation of 7½ to 7½. Chiverton shares are steady at 7½ to 7½. West Chiverton shares are firmer, and more in demand, at 60 to 61; the mine never looked better. North Crofty shares are better, at 5½ to 5½; Great Laxey shares maintain the late rise, and close 16½ to 17½; Great Wheal Vor shares continue in demand, at 21 to 21½; South Condurrow, 4 to 4½; Prince of Wales shares have again been largely dealt in, and close at the highest point of the week—55s., 57s. In Foreign Mines, Chontales shares are better, closing at 2½ to 3; the report from the mine will be found in another page. Cape Copper shares are flat, at 4½ dis. to par; Don Pedro North del Rey, 5-16ths to ½ prem.; Pestarena, 1½ to 1½; Port Phillip, 4 to 4½; St. John del Rey, 5½ to 5½; United Mexican, 2 11-16ths to 2 13-16ths. At the Westminster Mine the engine has been delivered, and is in course of erection.

At Truro Ticketing, on Thursday, 3928 tons of ore were sold, realising 17,299l. 8s. The particulars of the sale were:—Average standard, 114l. 8s.; average produce, 6½; average price per ton, 4l. 8s.; quantity of fine copper, 245 tons 6 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Feb. 21	3167	116 2 0	6½	£4 10 6	14s. 5d.	272 11
" 28	2158	108 15 0	7½	5 9 0	14 5½	72 11
Mar. 7	2279	107 18 0	7½	5 7 6	14 3	71 11
" 14	1424	115 13 0	8½	3 11 6	13 1	65 11
" 21	3928	114 8 0	6½	4 8 0	14 1	70 11

Compared with last week's sale, the advance has been in the standard 2l., and in the price per ton of ore about 2s. 6d. Compared with the corresponding sale of last month, the decline has been in the standard 1l. 15s., and in the price per ton of ore about 2s. 3d.

The Standards of Tin Ore were advanced on Tuesday 4s. per cwt., and are now as follows:—Common, 85s.; superior common, 86s.; fine, 88s.; superior fine, 89s. Metal is advanced 2s. per cwt. also—Common, 99s.; refined, 95s.

An influential cost-book company—the London management of which has been accepted by Mr. George Noakes, the managing director of Great Wheal Vor—has been formed for working the NORTH WHEAL CHIVERTON SILVER-LEAD MINE, in the best and most productive lead mining district in Cornwall, and a little to the north of the celebrated West Chiverton Mine. It is mentioned in the prospectus, which will be found in another column of this day's *Journal*, that West Chiverton was sold, about April, 1863, for 30,000l., or at the rate of 10l. per share, and was afterwards divided into 3000 shares; it is now selling at 60l. to 62l. per share, or 180,000l. to 185,000l. for the mine, and at one time the price was equal to 260,000l. for the mine. The property has been carefully inspected and reported upon by Capt. Juleff and Nancarrow, of West Chiverton; Rowe, of Laxey; Johns, of West Caradon and Trelawny; W. C. Vivian, of North Wheal Crofty; and Rogers, late of Old Tamar. Capt. Juleff states that the engine-shaft is in a good position for proving the value of this property, which he believes will remunerate the adventurers for their outlay. Capt. Nancarrow explains that the 15,000l. expended

the late company has been laid out in getting it into good working order; all future capital will be spent in developing the lodes, and if this is prosecuted with vigour he has no doubt important discoveries will be made. The other inspecting agents fully confirm these views.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 6147l. 6s. 6d. per share, arising from profits on sales of copper ores, sampled in the months of November and December last. After payment of the same there remains in hand a balance of 18,113l. 6s., in cash, or bills not at maturity, and reserve fund, applicable to the general purposes of the company.

At Great Wheal Vor United Mines meeting, on Wednesday (Mr. George Noakes, F.G.S., in the chair), the accounts showed a credit balance of 2077l. 5s. 5d. A dividend of 7s. 6d. per share was declared, leaving a balance of 2077l. 5s. 5d. in another column.

At Wheal Trelawny quarterly meeting, on Tuesday (Mr. W. Nicholson in the chair), the accounts showed a credit balance of 1754l. 12s. 1d. A dividend of 200l. (5s. per share) was declared. Particulars in another column.

At Craddock Moor Mine meeting, on Tuesday, the accounts for the quarter ending October showed a credit balance of 457l. 18s. 4d. A call of 7s. per share was made. Capt. H. and J. Taylor and H. Phillips reported upon the state of the mine. They are cross-cutting at the 72 ft. level with all view to reach Gilpin's lode, because having ore both east and west in that lode they may reasonably expect to find it here also; it is, therefore, a very important point to reach, being in whole ground to surface. They expect to sell about 100 tons of copper ore for the next two months.

At St. Day United Mines meeting, on Tuesday, the accounts for the quarter ending December showed a credit balance of 1442l. 14s. 3d., and a loss on the two months' working of 1447l. 11s. 10d. A call of 8s. 6d. per share was made. Capt. Cock, Gilbert, Oates, and Boudry reported upon the various points of operation. Their machinery is working very well, and the water is considerably abated. They can now stop Trussell's engine, which will effect a saving of 100l. per month.

At East Laxey Mine meeting, on March 14 (Mr. James Humby in the chair), the accounts showed a balance of assets over liabilities of 1091l. 14s. 4d. Capt. W. H. Rowe reported upon the various points of operation.

At Reinnie Laxey Mine meeting, on March 14 (Mr. James Humby in the chair), the accounts for the ten months ending December showed a balance of assets over liabilities of 1689l. 3s. 1d. Capt. W. H. Rowe reports that the present appearance of a very encouraging character, his great hope of any really good discovery rests upon the result of certain junctions which must occur further up the mine, and nearer the granite, but to reach which the hoisting of the shaft with the deep adit is indispensable, in order to ventilate the latter, unwater the shaft, &c., and dispense with the pitwork. This, he believes, should be the main object of the company, and the best plan of working to be pursued.

At West Trelawny Mine meeting, on Wednesday (Mr. W. H. Williams in the chair), the accounts showed a loss since the previous meeting of 300l. 17s. 11d. The liabilities were (including 368l. 9s. 2d. disputed) 733l. 18s. 3d. The arrears of call amounted to 221l. It was resolved to wind-up voluntarily, and Mr. Charles Warwick was appointed liquidator. An arrangement was entered into with the representative of the petitioners to the Stannaries' Court to withdraw his petition for a winding-up by the Court.

At North Jane Mine meeting, yesterday (Mr. Woodward in the chair), the accounts to the end of January showed a balance of assets over liabilities of 221l. 0s. 9d. A call of 1s. per share was made. The lode lately intersected in the engine-shaft at the shallow depth of only 36 fms. from surface is very promising, and worth 5l. per fm. for muddle, and good work for tin. The manager considers the prospects far more cheering than for a long time past.

At East Chiverton Mine meeting, yesterday, the accounts showed a balance of liabilities over assets of 301l. 11s. A call of 2s. 6d. per share was made. It is anticipated that the Chiverton lode will be met with in about three months, when a good discovery is expected.

At West Basset Mine meeting, on Wednesday, the accounts showed a balance carried forward from last meeting, 271l. 3s.; costs for December, 1866, and January, 1867, 2077l. 5s. 5d.; boundary cost, on account, 107l.; advance on tribute, 2107l.; royalty, 1237l. 17s.; sundries, 21l. 8s. 1d.; 2663l. 13s. 3d.; Copper ore sold, 1103l. 14s. 11d.; tin sold, 809l. 19s. 6d.; advance on tribute received, 2807l.; balance, 499l. 18s. 11d.; 2663l. 13s. 3d. A call of 5s. per share (1600l.) was made, and there are the proceeds of sales of ore not yet at maturity, amounting to 667l. 7s., applicable for the general purposes of the adventure. The lode in the 154 west has recently improved in productiveness, and will now yield 3 tons of ore per fathom, and the winze sinking below the 144 will yield 4 tons of ore per fathom. [In another column will be found a letter, which has been addressed to Mr. W. A. Thomas, by Mr. Finch, the solicitor of the company, in reference to the law charges for the action of "Lyle v. Richards."]

At North Dolcoath general meeting, on Thursday (Mr. A. Bingham in the chair), the accounts for the six months ending February showed a debit balance of 772l. 2s. 4d. A call of 3s. per share was made. It was resolved that the mine materials, &c., be sold, and a meeting was called for April 25 to confirm that resolution.

At the Ebbw Vale Company meeting, on Tuesday (Mr. John Platt M.P., in the chair), the Chairman gave an elaborate analysis of the report of the Committee of Investigation, pointing out the details wherein the board agreed with and differed from the conclusions arrived at, and remarking that, although the directors did not adopt the report, they did not impugn it. The proposition to raise the additional capital by a call of 5l. per share was received by the meeting (which was an unusually large one) with applause, and a resolution was passed, ordering the expenses of the Committee of Investigation to be paid by the company, and thanking them for their services. Mr. Phillips was chosen for a seat at the board; and thanks to the Chairman and directors, which are fully reported in another column, terminated the proceedings.

At Don Pedro North del Rey Gold Mining Company meeting, on Wednesday (Mr. Henry Haymen in the chair), a dividend of 2l. per share (free of income tax) was declared. Details in another column.

At the Santa Barbara Gold Mining Company meeting, held on the March 15, at Liverpool, it was resolved that the report be received, and the accounts passed; also that "in consequence of the continued favourable reports, and with a view to the ultimate sale of the mine, the liquidator be authorised to carry on the working of the mine, incurring no liabilities which will not be covered by the present assets of the company."

On the Stock Exchange there has been considerable animation in Mining Shares during the week. The following prices were officially recorded in British Mining Shares:—East Basset, 22½; East Caradon, 5½; Great Wheal Vor, 20½, 20½, 21½, 21½, 21½; Prince of Wales, 2½, 2½, 2½, 2½; Wheal Buller, 24½; Clifford Amalgamated, 6½, 7; North Wheal Crofty, 5½, 5½, 5½; Tincroft, 15½; East Laxey, 10½; Great Laxey, 17, 16½, 16½; East Wheal Russell, 3½; East Carn Brea, 24½. In Colonial Mining Shares the prices were:—Scottish Australian, 15-16ths; Yudanumana, 1, 15-16ths; Cape Copper, 6½, 6½, 7. In Foreign Mining Shares the prices were:—Chantales, 2½, 2½, 2½, 2½, 2½; Don Pedro North del Rey, 7-16ths, 5-16ths, 5-16ths, 5-16ths; St. John del Rey, 5½, 5½, 5½, 5½, 5½; United Mexican, 2½, 2½, 2½; Pestarena Gold, 14.

COPPER TRADE.—Messrs. Vivian, Younger, and Bond (March 22) write:—The absence of demand is still the leading feature in the article. The market received from Chili on the 18th inst. advised charters for 1850 tons of bars for England, and 150 tons of bars for France, so that the supplies up to the present show no sign of falling off. Under these circumstances, the market has been depressed, and prices must be considered 1l. to 2l. per ton lower all round. A parcel of 150 tons of Urmeneta bars has been done at 71l., and some Urmeneta bars at 80l.; otherwise we have no transactions to report.

OPORTO MINING COMPANY.—From Portugal we learn that this company is about to commence operations on a large scale.

CONNORRE MINING COMPANY (LIMITED).—Notice is hereby given, that an ORDINARY GENERAL MEETING of this company will be held at their offices, 33, Westland-row, Dublin, on SATURDAY, 30th March, 1867, at Two o'clock P.M., for the purpose of submitting the report of the directors and statement of accounts for the half-year ended 31st December, 1866, and for the transaction of the ordinary business of the company. The Transfer Books of the company will be closed from the 23rd to the 30th inst., both days inclusive. By order, GEORGE DEDRICKSON, Sec. 33, Westland-row, Dublin, 26th March, 1867.

THE CWT-Y-BUGAIL SLATE COMPANY (LIMITED).—NOTICE OF CALL.—FIFTH CALL OF FIVE POUNDS PER SHARE, MAKING THIRTY-FIVE POUNDS PER SHARE PAID.—Notice is hereby given, that the Board of Directors of the CWT-Y-BUGAIL SLATE COMPANY (LIMITED) has this day MADE A CALL OF FIVE POUNDS PER SHARE on the shares in their company, payable on the 13th day of April next, at Messrs. Roberts, Lubbock, and Co., London; or Messrs. Williams and Co., Chester, Dagenham, and Carnarvon. Shareholders are, therefore, requested, on or before that date, to pay the amounts on the shares of which they are the registered proprietors. JOSEPH HAYWOOD, Managing Director, Bangor, March 15, 1867.

WALTER TREGELLAS, 122, BISHOPSGATE STREET E.C., DEALS IN ALL KINDS OF bona fide STOCKS AND SECURITIES, AND BRITISH AND FOREIGN MINES, either for cash or the fortnightly settlement at close prices. Accommodates the purchase of Don Pedro North del Rey, Anglo-Brazilian, East Caradon, South Crofty, West Frances, West Tolgus, East Gannislake, Chiverton Moor, Camborne Veau, Emily Henrietta, and Westminster. Bankers: Alliance Bank.

STEAM ENGINE.—FOR SALE, a 60 in. PUMPING ENGINE, equal beam, 10 ft. stroke, with TWO 10 ton BOILERS. This engine is by Messrs. Nicholson and Co., of the Bedford Foundry, Tavistock, and is the best in the engine for sale in Cornwall or Devon.—For further particulars, apply to JAMES HICKEY, 22, Austin Friars, London.

SLATE QUARRY REPORTS.—JOHN BOWER, D.C.L. Oxon, Barrister-at-law, who has been for nine years Manager and Director of the Snowdon Slate Quarries Company (Limited), is PREPARED TO INSPECT and REPORT on any QUARRY or SLATE VEIN in NORTH WALES, and his REPORT would include every fact FAVOURABLE or UNFAVOURABLE. Address, Glydri View, Llanberis.

NERBUDDA COAL AND IRON COMPANY (LIMITED).—ENGINEERS AND MINERS WANTED FOR INDIA.—This company are DESIROUS OF ENGAGING the SERVICES of an EXPERIENCED PRACTICAL ENGINEER to superintend the working and repairing engines; one possessing a good knowledge of coal mining would be preferred. They also require an UNDERGROUND MINE BAILIFF, thoroughly acquainted with coal mining, and capable of working and repairing engines in case of need.—Address, Secretary of the company, with testimonials, stating age, salary required, length of former employ, &c. By order, HERBERT HEATH, Sec. Offices, 9, Sise-lane, Bucklersbury, London, E.C., March 22, 1867.

WANTED, an AGENT for the HEBDEN MOOR LEAD MINES, WHARFDALE, YORKSHIRE. Preference given to one who has been engaged in the North of England. Must be practically acquainted with underground and surface operations, and pumping; also, able to dial the ground and draw plans.—Apply to Mr. JOSEPH STONE, 6, Upper Fountaine-street, Leeds, stating qualifications and salary required.

WANTED, a YOUNG MAN as MASTER WASTEMAN for a LARGE COLLIERY in the MIDLAND COUNTIES. The duties will be thoroughly practical, and he must be a fair writer.—Apply, in writing, to "R. M. H.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

WANTED, an ASSISTANT MANAGER for the BARROW IRON AND STEEL WORKS. He must thoroughly understand blast-furnaces, engines, rolling-mill machinery, &c.—Address, the BARROW HEMATITE STEEL COMPANY, Barrow-in-Furness, Lancashire.

WANTED, a RE-ENGAGEMENT as COLLIERY MANAGER. Many years' experience and first-class testimonials. No objection to go abroad.—Apply to "H. M.," MINING JOURNAL office, 26, Fleet-street, London.

LIVERPOOL, a WELL-ESTABLISHED HOUSE in the METAL TRADE in LIVERPOOL is OPEN to ACCEPT a GOOD AGENCY.—Apply, by letter, addressed "M.," care of Messrs. Woodburn and J. PEMBERTON, Liverpool.

A GENTLEMAN, aged 40, of considerable experience, having had a good Mining and Engineering Education, and accustomed to the Management of Mines, &c., WISHES a RE-ENGAGEMENT as MANAGER to a COMPANY about to OPEN NEW MINES, either in SCOTLAND or IRELAND. First-class references can be given. No objection to going abroad.—Address, "P. Q.," care of Lee and Nightingale, Advertising Agents, Liverpool.

A GENTLEMAN having an extensive connection with merchants manufacturers, and others, would be GLAD to UNDERTAKE the SALE of PATENTED ARTICLES or INVENTIONS, upon commission.—Apply to Mr. W. T. RAWLE, patent and mining agent, 8, Small-street, Bristol.

CAPITAL WANTED TO COMPLETE the DEVELOPMENT of a VALUABLE MINE, yielding COPPER, SILVER, and LEAD. The proprietors have made considerable progress in the works at the mine, and have already raised a few tons of ore from shallow sinkings, yielding 30 per cent. of copper and some silver. This lode is continuous, and extends to a distance of about half a mile. There are beside other rich lodes. Machinery is now essential for the active working of the undertaking, which promises most brilliant results. £5000 would probably be sufficient. £10,000 would be ample for all purposes. Further information will be given to applications addressed "P. Q.," MINING JOURNAL office, Fleet-street, E.C.

TO GOLD MINING COMPANIES, AND OTHERS.—The ADVERTISER, who has had considerable experience as a Mining Engineer, and is thoroughly acquainted with the extraction of gold from quartz, &c., WISHES a RE-ENGAGEMENT TO GO ABROAD, to ERRECT, or SUPERINTEND, GOLD REDUCTION WORKS, or to TAKE THE GENERAL MANAGEMENT OF GOLD MINES. Good references will be given.—Apply to "M. E.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

CLIFFORD AMALGAMATED, WANTED TO EXCHANGE, a large number of the above for SHARES in CHIVERTON, CHIVERTON MOOR, NORTH ROSKEAR, and EAST LOVELL.—Address, "Y. D.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

THE SCOTTISH AUSTRALIAN MINING COMPANY (LIMITED).—THE DIVIDEND on the capital of this company, at the rate of SEVEN AND A HALF PER CENT. PER ANNUM, free of income tax, will be PAYABLE at the bankers of the company, the Union Bank of London, on and after the 20th inst., at Twelve o'clock precisely. C. GRAINGER, Secretary, 1, King's Arms-yard, Moorgate-street, March 19, 1867.

MARIQUITA MINING COMPANY (LIMITED).—Notice is hereby given, that the directors have THIS DAY made a SECOND CALL of TWO SHILLINGS AND SIXPENCE per SHARE, payable at Messrs. Barclay, Bevan, Tritton, Twells, and Co., on or before the 1st May next. By order, C. O. ROGERS, Sec. 6½, Austinfriars, London, March 14, 1867.

ANGLO-MEXICAN MINT OFFICE.—Notice is hereby given, that the ANNUAL GENERAL MEETING of shareholders in this company will be HELD at the office, as under, on TUESDAY, the 24th day of April next, when one director will be elected in the place of George Curlew Hockin, Esq., who goes out by rotation, but is eligible for re-election, and will be proposed accordingly. The chair will be taken at One o'clock precisely. ALFRED GODFREY, Sec. 4, Finsbury-place South, March 22, 1867.

MYWINDY IRON ORE COMPANY (LIMITED).—Notice is hereby given, that the TRANSFER BOOKS of the above company will be CLOSED until after the 31st inst. By order, N. M. MAXWELL, Secretary, London, March 16, 1867.

MYWINDY IRON ORE COMPANY (LIMITED).—Notice is hereby given, that the FIFTH ANNUAL GENERAL MEETING of the shareholders in the above company will be HELD at the offices of Messrs. John Taylor and Sons, No. 6, Queen-street-place, Upper Thames-street, on WEDNESDAY, the 27th inst., at Twelve o'clock precisely. Pursuant to notice, the Transfer Books are closed until after the 31st inst. By order, N. M. MAXWELL, Secretary, London, March 16, 1867.

THE LUSITANIAN MINING COMPANY (LIMITED).—Notice is hereby given, that, in accordance with the Deed of Settlement, the THIRTEENTH ANNUAL GENERAL MEETING of the shareholders in this company will be HELD at this office, on THURSDAY, the 4th day of April next, at Two o'clock in the afternoon, to receive the reports and accounts for the year ending 30th September, 1866, and for general purposes. At this meeting two directors, viz.—John Taylor, Esq., and Richard Taylor, Esq., will retire from office by rotation, but are eligible, and offer themselves for re-election. One of the auditors, W. T. Fawcett, Esq., will also go out of office at this meeting, but, being eligible, offers himself for re-election. By order of the Board, W. G. WILLIAMS, Secretary, 5, Queen-street-place, London, E.C., 20th March, 1867.

FORTUNA COMPANY (LIMITED).—Notice is hereby given, that, in conformity with the Deed of Settlement, the HALF-YEARLY GENERAL MEETING of the shareholders in this company will be HELD at this office on Friday, the 29th inst., at Twelve o'clock. To receive the accounts and balance-sheet, with reports from the directors, auditors, superintendent, and mining agents, for the half-year ending 31st December, 1866. To elect two directors in the place of John Addis and Robert Henty, Esqrs., who go out of office by rotation, but who are eligible, and offer themselves for re-election. To appoint two auditors for the ensuing year—James Thomas Dorrington, Esq., and Robert Palgrave, Esq., are eligible, and offer themselves for re-election and for general business, as authorised by the Deed of Settlement. H. SWAFFIELD, Secretary, No. 5, Queen-street-place, Upper Thames-street, London, E.C., March 20, 1867.

THE LINARES LEAD MINING COMPANY (LIMITED).—Notice is hereby given, that, in conformity with the Deed of Settlement, the HALF-YEARLY GENERAL MEETING of the shareholders in this company will be HELD at this office on FRIDAY, the 29th inst., at Two o'clock P.M. To receive the accounts and balance-sheet, with reports from the directors, auditors, superintendent, and mining agents, for the half-year ending 31st December, 1866. To elect two directors in the place of John Taylor and Richard Taylor, Esqrs., who go out of office by rotation, but who are eligible, and offer themselves for re-election. To appoint two auditors for the ensuing year—Robert Palgrave, Esq., is eligible, and offers himself for re-election; J. R. Pell, Esq., who is eligible, offers himself in the place of F. J. Bramwell, Esq., who has resigned and for general business, as authorised by the Deed of Settlement. H. SWAFFIELD, Secretary, No. 5, Queen-street-place, Upper Thames-street, London, E.C., March 20, 1867.

THE ALAMILLOS COMPANY (LIMITED).—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders in this company will be HELD at this office on FRIDAY, the 29th inst., at One o'clock P.M. To receive the accounts and balance-sheet, with reports from the directors, auditors, superintendent, and mining agents, for the year ending Dec. 31, 1866. To elect two directors in the place of John Addis and William Cox, Esqrs., who go out of office by rotation, but who are eligible, and offer themselves for re-election. To appoint two auditors for the ensuing year—John Robinson Pell, Esq., is eligible, and offers himself for re-election; Robert Palgrave, Esq., who is eligible, offers himself for election in the place of F. J. Bramwell, Esq., who has resigned and for general business, as authorised by the Articles of Association. H. SWAFFIELD, Secretary, No. 5, Queen-street-place, Upper Thames-street, London, E.C., March 20, 1867.

MESSRS. DEBENHAM AND CO., No. 37, MOORGATE STREET, LONDON, E.C. (and at ST. ALBANS).

TRANSACT BUSINESS in every description of STOCK EXCHANGE SECURITIES, MINING and MISCELLANEOUS SHARES, at close market prices. FOR SALE.—50 Frontino and Bolivia, 75 Prince of Wales, 10 North Roskear, 20 Bryn Gwlog, 10 Wheal Vor, 20 East Russell, 100 New Quebrada. BUYERS of Worthing and West Caradon.

TO COLLIERY PROPRIETORS.—A COAL COMPANY, just commenced business, with a permanent staff of fifty canvassing agents, is PREPARED TO ENTER INTO NEGOTIATIONS for the SOLE LONDON AGENCY of a GOOD HOUSE COAL.—Apply to the Manager, W. H. JOHNSON, Esq., 140, Fleet-street, London, E.C.

HALKYN MOUNTAIN—THE MILLERS' MINE.—A NUMBER of SHARES in the above very promising MINE, having a large extent of land, and six shafts on the same vein. TO BE DISPOSED OF immediately. No need of steam-engine for killing water.—For particulars, apply to "X. Y.," Post Office, Flint.

LANFAIR GREEN AND BLUE SLATE QUARRY COMPANY (LIMITED).—Manager, T. HARVEY, Esq., "TO BE SOLD, FORTY SHARES, at 21 per share. No calls.—Address, "A. B.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

SHARES FOR SALE, at a great sacrifice, in a VALUABLE SLATE QUARRY.—Apply by letter, to "B. L.," care of Messrs. Field and Tuer, 136, Minories, London.

FINEST HEMATITE IRON ORE.—FOR SALE, a MINE, containing a very large lode, which can be worked for years without machinery. Moderate dues, and very easy carriage to port. The last sale of ore made 20s. per ton.—Apply to Capt. HITCHENS, St. Teath, Camelford, Cornwall.

FOR SALE, FOUR NEW WROUGHT-IRON TUBULAR LEGS, 54 ft. long, 84 in. square at base, and 10 in. square at top, weighing about 2 tons each.—For further particulars, apply to the BIRTLEY IRON COMPANY, Chester-le-Street.

TO BE SOLD, cheap, a PORTABLE ENGINE of 14 horse power, double cylinder, of first-class construction, workmanship, and material. Winding gear to order. SECOND-HAND PORTABLES FOR SALE.—Apply to Messrs. BARNOWS and CARMICHAEL, engineers, Banbury, Oxon.

PUMP-LIFTS, TO MINING COMPANIES, AND OTHERS.—The EXECUTORS of JESSE VARLEY, BROOKFIELD FOUNDRY, ST. HELEN'S, LANCASHIRE, having PATTERNS for all sizes of PUMP LIFTS, and being specially PREPARED for their MANUFACTURE throughout, are in a position to supply them at reasonable prices, and with speed. Estimates for the lifts complete, or price per cwt. for the pump trees alone, forwarded on application.

LEAD ORES.				
Date.	Mines.	Tons.	Amount.	Purchasers.
March 11—Isle of Islay.....	23	.....	£14 5 6	Walker, Parker, & Co.
— ditto	31	.....	13 15 0	ditto
15—Isle of Man Mining Co. 100	.....	25	10 0	Barry Port Co.
19—Cae Conroy	15	.....	13 16 6	Walker, Parker, & Co.
— ditto	15	.....	13 16 6	Adam Eytton.

BLENDE.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
March 11—Gronant	40	.....	£ 5 10 6	Vivian and Sons.

COPPER AND COPPER ORES sold at LIVERPOOL, from February 28 to March 14.

Messrs. Piteatru-Campbell and Co. (under date March 15) write—There is no improvement to notice in the demand for English copper, and lower prices have been accepted for the raw material. Quotations are 14s. 6d. for ore and regulus, 73l. and 73l. 10s. bars, and 16s. Barilla. The mail from Valparaiso, with dates of Jan. 17, received since our last, give particulars of shipments from the coast for the whole of the year 1866, and it will be seen that the deficiency, which at one time promised to be large, only amounts to 2352 tons. The shipments in the last quarter were 272,979 quintals, against 178,836 quintals in the corresponding period of 1865. The figures of shipments for the last five years are as follows:—

	1862.	1863.	1864.	1865.	1866.
First quarter.....	259,572	179,785	348,561	288,294	293,429
Second quarter.....	230,788	125,970	214,022	296,716	225,634
Third quarter.....	217,017	163,583	195,112	300,343	216,360
Fourth quarter.....	240,938	246,531	287,280	178,836	272,979
Quintals	948,315	715,869	1,044,975	1,064,189	1,008,462
Tons	43,109	32,540	47,500	48,372	45,840

Sales since our last have been—					
Mine or ship. Tons.		Price.	Mine or ship. Tons.		Price.
Ore—Henry Bath	710	£ 0 15 0	Reg.—Capricorn	309	£ 0 14 6
Bars—Second hands	56	74 0 0	Reg.—Delta	142	0 14 6
Bars—Second hands	74	73 0 0	Ore—Powhattan	168	0 14 6
Bars—Second hands	58	73 0 0	Reg.—John	598	0 14 6
Bars—Urmenita	11	72 10 0	Bars—Second hands	100	73 0 0
Reg.—Golconda	7	0 14 6	Bars—Hertfordshire	75	73 0 0
Reg.—Gamma	100	0 14 6	Bars—Second hands	16	73 0 0
Ore—Epsilon	348	0 14 6	Bars—Nauphante	16	73 0 0
Ore—Capricorn	225	0 14 6	Reg.—Powhattan	447	0 14 6
The arrivals have been at Liverpool, 220 tons bars, ex Erycina; 630 tons ore, ex Warwickshire; 35 tons bars, ex Nauphante. At Swansea—169 tons ores and 43 tons of Powhattan.					
Stocks of copper (Chilian and Bolivian) in first and second hands likely to be available are—					
Ores.		Regulus.	Bars.	Ingot.	Barilla.
Liverpool	1708	3170	2662	549	373
Swansea	3338	3059	213	.....	64
Fine copper at Liverpool, Swansea, and Havre, March 16, 1864, 5390 tons; 1865, 11,600 tons; and 1866, 14,350 tons.					

The arrivals have been—At Liverpool, 220 tons bars, ex Erycina; 630 tons ore, ex Warwickshire; 55 tons bars, ex Nauphante. At Swansea—169 tons ores and 442 tons bars Powhattan.

Stocks of copper (Chilian and Bolivian) in first and second hands likely to be available are—				
Ore.	Regulus.	Bars.	Ingot.	Barilla.
Liverpool	1708	3179	2662	540
Swansea	3338	3039	213	—
Fine copper at Liverpool, Swansea, and Havre, March 16, 1864, 5200 tons; 1865, 11,600 tons; and 1866, 14,350 tons.				

COPPER ORES. Sampled March 6, and sold at the Royal Hotel, Truro, March 21.

ditto	109	4 17 6	ditto	26	6 16 6
ditto	106	3 10 6	Wheat Friendship	97	4 13 6
ditto	101	3 9 0	ditto	80	2 8 6
ditto	97	5 7 6	ditto	30	13 1 0
ditto	86	3 8 6	Wheat Emma	47	3 12 0
ditto	60	2 7 6	ditto	39	2 8 6
ditto	36	11 16 6	ditto	27	7 12 0
ditto	33	12 9 6	ditto	11	11 15 0
ditto	18	5 6 0	Bedford United	57	3 14 6
ditto	11	6 15 6	ditto	60	3 14 6
Hingham Down	96	3 18 0	Gunnis Lake (Clitters)	52	4 5 6
ditto	87	3 9 6	ditto	30	13 4 0
ditto	86	3 10 6	East Russell	42	2 14 0
ditto	80	3 2 0	ditto	15	0 0 0
ditto	75	3 7 6	ditto	13	3 3 6
ditto	27	10 6 6	W. Maria & Fortescue	52	2 5 6
Marke Valley	89	5 4 0	ditto	12	5 9 0
ditto	81	3 3 6	New Cornish	37	3 13 6
ditto	78	2 18 6	ditto	20	2 5 6
ditto	70	4 13 6	Crelake	50	4 2 0
ditto	65	6 6 6	Farnson	34	6 1 0
ditto	47	3 14 6	James's Ore	27	3 19 6
Devon and Cornwall	71	3 3 0			

WATSON AND CUELL'S MINING CIRCULAR

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON AND CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and the state of the share market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON and CUELL have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and from the lengthened experience of Messrs. WATSON and CUELL, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are also daily asked their opinion of particular mines, as well as to "recommend" mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

THE STANNARIES COURT—"T. H."—A great deal of unnecessary alarm is created by the Stannaries Court officials inserting the names of "past members" as contributors, though we suppose the answer would be that it is according to law. The list is made out in the names of B. or past members of the company, and A. or present members, the A's being the real contributors, while the B's are a corps of reserve, because the A's cannot pay the fines imposed, as in the case now referred to, the debts are trifling, and the present members able to pay, there could be no occasion to insert the past members.

"M. P."—We have always been of the opinion, so ably expressed by the *Ouel* this week—that it should not always be an object to contradict what is false; for, in most cases, those who utter the falsehood (and this is particularly the case in regard to those with whom we might have to do) would probably not be worth contradicting, or, even if they were, the event would speedily contradict for itself.

"M. A."—We will try and answer this next week.

"X. Y. Z."—This also.

"J." (Bryn Gwlog).—We have often stated here that the quotations given in the City Article are those of the Mining Exchange, and not ours personally. The list is open at the Exchange till 4 o'clock, and we are always glad and anxious to receive authentic information as well as certified prices. In the case of Bryn Gwlog the quotation was merely copied from the Official List.

WEST PRINCE OF WALES.—A large number of shares have been applied for by shareholders in Prince of Wales, and we have also received applications for a great many from others. But it has been suggested to the committee by several shareholders, that as the public are going into mines, and the West Prince of Wales is a bona fide and good speculation, they should have an opportunity of getting shares, and for this purpose a short prospectus should be advertised in some of the daily papers. If double the number of shares to be allotted are thus applied for, they will, probably, go to a high premium.

BRITISH AND FOREIGN INVESTMENT.

MR. THOMAS SPARGO, STOCK AND SHAREDEALER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C. TRANSACTS EVERY DESCRIPTION OF BUSINESS IN THE PURCHASE AND SALE OF SHARES IN BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, AND ALL OTHER DESCRIPTIONS OF BRITISH AND FOREIGN STOCK.

MR. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.

Bankers: Consolidated Bank, and Metropolitan and Bank (Limited).

GUIDE TO INVESTORS.—MR. SPARGO'S "Guide to Investors"

for the present month contains a Tabular Statement of Banking, Mining, and other Companies, City Facts and Incidents, and a Price List of Shares in Banks, Canals, Railways, Bridges, and Finance Companies; articles on the most important commercial subjects; it also contains Rate of Discount at Home and Abroad; Investments—Domestic and Foreign; Gold and Silver Mines; together with necessary detailed information connected with the Stock and Share Markets, Mines, and Miscellaneous March, 1867.

224 and 225, Gresham House, Old Broad-street, London, E.C., March, 1867.

JAMES SCOTT AND CO., STOCK AND SHAREDEALER,

1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C. All Stock Exchange securities dealt in at close market price, for cash or the bi-monthly settlement. References given to any of the United Kingdom. JAMES SCOTT and Co. have SPECIAL BUSINESS in the following MINING SHARES:—East and West Caradon, East Lovell, East Wheal Russell, North Crofty, Frank Mills, Drake Walls, Prosper United, Prince of Wales, Great South Tolgus, Chontales, and Frontino and Bolivia.

MINING OFFICES, MANCHESTER.

THOMAS MOLYNEUX AND CO., MINE AGENTS AND SHAREBROKERS. Reliable information can be obtained as to purchase and sale of shares.

Offices of the Ellen United Copper and Zinc Mining Company (Limited), and Hazel Grove Silver-Lead Mining Company (Limited). THOMAS MOLYNEUX, secretary, 28, Princess-street, Manchester.

MANCHESTER, AND WEST END OF LONDON.

MR. W. HANNAH, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER. ROYAL INSURANCE BUILDINGS, KING STREET MANCHESTER; and 49, STRAND, LONDON, W.

INSTANTANEOUS COMMUNICATION WITH THE STOCK AND MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices. A Monthly Investment Circular on application.

SHAREHOLDERS IN PUBLIC COMPANIES desirous of

avoiding calls and further responsibility will find purchasers on applying to Messrs. BARRETT AND CO., 74, LOMBARD STREET, CITY, and No. 20, SPRING GARDENS, CHANCERY LANE. Stocks, shares, mining, and other miscellaneous securities bought and sold. Investment Review on application. Cash advances made.

CAPT. S. MICHELL, OF NEW TRELEIGH MINE, REDRUTH.

has PROCURED SEVERAL MINING SETTS, TWO of which are situated in the neighbourhood of the CHIVERTON MINES, and are traversed by several large SILVER-LEAD LODES peculiar to that district; and one in ILLONGAN, containing five lodes, all of which are productive in COPPER, BLEND, MUNDIC, and LEAD. Also, a MUNDIC SETT, that he can safely recommend. Capt. S. MICHELL will not oblige with any respectable party with a view to DISPOSING OF OR WORKING these VALUABLE PROPERTIES.

CAPT. RICH, BODMIN, CORNWALL, being in the centre of the

mining districts of Devon and Cornwall, and having had 25 years' experience in the management and inspection of mines, OFFERS HIS SERVICES TO INSPECT AND REPORT ON MINES in either of the above counties. Orders promptly attended to.

BASTIER'S CHAIN PUMP.

This patent pump is the MOST EFFICIENT in existence for LIFTING ANY QUANTITY of WATER from ANY DEPTH. One lifting from a depth of 170 ft. may be seen at work daily, on application to the

SOLE LICENSEES,

MESSRS. J. JACKSON AND CO., ENGINEERS, 17, GRACECHURCH STREET, LONDON, E.C.

Who SUPPLY PUMPS AND LICENCES.

Communications to Mr. Bastier, the patentee, to be sent to the same address.

AGENT FOR THE COUNTIES OF NORTHUMBRIA AND DURHAM, YORKSHIRE, DERBYSHIRE, AND NORTH STAFFORDSHIRE.

MR. THOMAS GREENER, MINING OFFICE, NORTHGATE, DARLINGTON.

AGENTS FOR SCOTLAND.

MESSRS. P. and W. MACLELLAN, 127 and 129, IRONGATE, GLASGOW.

THE IRON TRADE CIRCULAR (RYLANDS).

The "IRON TRADE CIRCULAR" is eminently the Business Journal of the Mining Districts. Its information is authentic, unbiased, and complete: comprising not only the business news of the South Staffordshire District, but generally of the entire Mining Districts of the Kingdom. Annual subscription, £2 2s. (or 10s. 6d. quarterly in advance). Advertisements and orders to be addressed to Mr. GEORGE RYLAND, Union-passage, Birmingham.

[From the Quarterly Trade Circular, Pittsburgh, United States.]

"Among our foreign exchanges, there is one we had intended to introduce into our readers, the 'Iron Trade Circular (Rylands),' published weekly at Birmingham, England, at £2 2s. (postage free). To those who desire to be kept fully advised upon the foreign iron and hardware markets this publication is a valuable one, and we present its name to our readers, from conviction of its value to the American trade."

WEST PRINCE OF WALES MINE.

In 12,800 shares. 10s. paid.

COMMITTEE OF MANAGEMENT.

S. W. DAUKES, Esq., Whitehall-place, Director of Railway Passengers Assurance Company.

J. H. MURCHISON, F.R.G.S., Austinfriars.

J. Y. WATSON, F.G.S., St. Michael's-alley, Cornhill, Chairman of the Prince of Wales Mine Company.

SECRETARY—Mr. Jehu Hitchens, St. Michael's House, St. Michael's-alley, Cornhill, London.

AGENT—Capt. Gifford, Manager of the Prince of Wales Mine.

PROSPECTUS.

This mine immediately adjoins the Prince of Wales, on the same lodes, and according to the reports which accompany this, has the same promising features that the Prince of Wales had at the same depth.

The lodes have been worked to a shallow depth for nearly two years, and have spent about £1000 upon it, but it derives its chief value now from its proximity to its rich neighbour, and the discovery of its lode.

The price charged to the present company is £1000 cash, and 4000 shares, 10s. paid-up.

The shares have been made the same in number as the Prince of Wales, and are offered, in the first instance, to the shareholders in that mine at par, provided they accept them on or before the 31st inst.

Of the money thus raised, £3400 will be working capital, to erect machinery, &c., so as to supersede the necessity of a call for a long period.

Applications for any shares that may not be taken by the Prince of Wales holders may be addressed to Mr. JEHU HITCHINS (the secretary); to Messrs. WATSON and CUELL, 1, St. Michael's-alley, Cornhill; or to Mr. J. H. MURCHISON, 8, Austinfriars (enclosing a cheque for the shares required), and they will be allotted in the order they are received. Prospectuses may also be had, containing reports, from five other agents, equally as favourable as those now published.

REPORTS.

West Prince of Wales, Feb. 4.—In accordance with your request, I have inspected the above mine, which is situated in the parish of Calstock, Cornwall, and bounded east by the Prince of Wales Mine, west by Wheal Mary Florence, north by East Kit Hill, and south by the East Cornwall and Silver Valley sets, the latter at present not granted. This sett is about 600 fms. long on the course of the lodes, and 400 fathoms wide, in which four east and west lodes have been already discovered. On the south, or what is considered to be the Prince of Wales lode, a shallow adit is taken up at the eastern boundary, and driven west about 20 fms.; lode varying from 1 to 2 ft. wide, yielding occasional stones of mundic and copper ore, the strata and the capel of the lode being precisely the same as found near the surface at the Prince of Wales, where they have the rich discovery, which needs no comment. On the No. 3 lode an adit level has been driven west from the eastern boundary 150 fms., a shaft sunk 18 fms., and communicated with the same lode varying from 1½ to 4 ft. wide, composed of quartz, capel, flookan, and tin, from which, it is said, above £2000 worth of the latter has been raised and sold. The north and south lodes, being not above 60 fms. apart, can be proved by cross-cuts from a shaft in the centre between the two middle lodes. I consider this sett is worth being prosecuted as a good speculation, and if carried out in a mining-like manner, with due regard to economy, and especially as the adjoining property, the Prince of Wales Mine, is opening up so profitably, it is well worth the notice of mining investors as a very fair speculation.

J. GIFFORD, Manager.

West Prince of Wales Mine, Feb. 2, 1867.—I beg to hand you my report of the above-named mine, which is situated in the parish of Calstock, in the county of Cornwall. This sett is extensive on the course of the lodes, being about ¾ mile in length and about 400 fms. in width, and contains four east and west lodes, also cross-courses, and is bounded on the north by the East Kit Hill Mine, on the west by Wheal Mary Florence, and on the east by the Prince of Wales Mine, and Wheal Brothers, and on the east by the Prince of Wales Mine. No. 1 south lode has been opened up by an adit level taken up in the eastern valley, and extended west on its course about 16 fms., composed of capel, quartz, priam, flookan, mundic, and gossan, and produces rich yellow copper ore at a shallow depth of 4 to 5 fms. This lode is supposed to be the Prince of Wales lode, and is embedded in a light mineral clay-slate. No. 2 lode is about 10 fms. to the north, rich presents healthy and promising appearance where seen, and of good size. No. 3 lode is about 30 fms. north of No. 2 lode. An adit level has been extended on its course, west from the eastern valley, about 160 fms.; also an adit shaft sunk 18 fms. The lode is large, composed of capel, quartz, priam, gossan, iron, mundic, peach, copper ore, and tin. Of the latter large returns have been made, and no doubt a rich lode still remains in the bottom of the adit level. No. 4 lode is about 12 fms. north of No. 3 lode, which is large, containing quartz in abundance, mundic, &c., and presents everything in connection with a productive copper-producing lode, with a light clay-slate, highly mineralised. Some promising results have been obtained to the north by costeaning underlying south, which will, no doubt, act as feeders to the lode. These lodes in the West Prince of Wales sett contain precisely the same capel as the lodes in the Prince of Wales Mine to the east, and are the same lodes and underlie, on north and south course, and present equally as promising a character, so far as developed. The granite range stands about 300 fms. to the north. In my opinion, if the West Prince of Wales property is vigorously developed, early and great results will be realised. The strata in which the lodes are embedded is a light clay-slate, highly mineralised. For the development of the property I would recommend a 40-in. cylinder pumping-engine. The carriage of materials will be easy, the mine being within a short distance of the Tamar River. In conclusion, I have much pleasure in recommending the West Prince of Wales as a legitimate investment.

JOHN GOLDSWORTHY.

West Prince of Wales Mine, Feb. 12, 1867.—I agree with your instructions, I again inspected this mine, and beg to forward the following as my report thereon. The geological position of this property is very good, being situated on the south side of the granite formation of Hingston Down and Kitt Hill. The sett is extensive on the course of several lodes. It is situated east of that promising copper mine, Wheal Mary Florence, and very productive, and very promising. The West Prince of Wales Mine, and embracing within its limits the whole of the rich copper and tin lodes of the latter mine. The operations in your sett have been confined to surface workings in search of the several lodes, and driving two adits on the course of the lodes discovered. No. 1, or north adit, has been driven some considerable distance on the course of a large, strong, and masterly lode, which produces occasional stones of copper ore; some good sales of tin have also been made therefrom, chiefly from the backs and shallow workings on this lode; but the depth in which the lodes are embedded is a light clay-slate, highly mineralised, composition and character being very similar to the copper lodes of the district. No. 2, or south adit, is taken up at the western boundary of the Prince of Wales Mine, and extended into the hill west about 16 fms., on a very promising lode, which at 4 or 6 fms. below surface produced saving work for copper, particularly at and from the bottom of the level; here the lode produces fully as much ore, or even more, than might be expected from such shallow workings. In the present adit the lode contains more flookan and quartz, a change not unusual in this district. From a general survey of West Prince of Wales and the Prince of Wales Mines, I am fully convinced the several productive copper and tin lodes of these mines run into and through your West Prince of Wales sett. The kilias or clay-slate by the side of the lodes is of a favourable character, and inexpensive to work. The property is distant about two miles from a shipping port, thus rendering the carriage of materials and ores inexpensive. The present good discoveries of copper ore in the Prince of Wales Mine add much to the value of your property, which I have no doubt will, when effectually developed, be profitable results.

THOMAS GREGORY.

Callington, Feb. 1, 1867.—I beg to hand you my report of West Prince of Wales Mine. This mine is situated 1½ to 2¼ miles east-north-east of Callington Close, south of the granite range of Kitt Hill, in a beautiful mineralised stratum of blue clay-slate, line of bearing east and west, line of dip south. There are four lodes known to go from east to west through the whole length of the sett, which is ¾ mile. This mine is bounded on the east by the Prince of Wales Mine, on the south by Wheal Brothers and Silver Valley Mines, on the west by Wheal Bearing and Wheal Mary Florence, on the north by Kitt Hill and East Kitt Hill Mines, and north-east by Hingston Down Mine. The south, or No. 1 lode, is a continuation of the Prince of Wales lode. We have driven on its course about 15 fathoms, and have broken up very good copper ore—good saving work—and by driving a level off, further we should have from 25 to 30 fms. of backs. No. 2 lode is about 10 fathoms north of No. 1 lode; it is a large, strong lode, with good spots of ore where opened at the surface, and it is a continuation of the same lode as they are driving their adit on where they are raising their ore at Wheal Mary Florence. I would strongly recommend driving a cross-cut from the present end of No. 1 to intersect No. 2, where we shall have 10 fathoms of backs. No. 3 lode is about 25 fathoms north of No. 2. There have been about 150 fathoms driven on this lode, and £2000 worth of tin sold from it, but the end at present is undrained. I believe this lode will make copper at a deeper level, like its neighbour, Hingston Down Consols. The stones last broken from the end are deeply stained with peacock copper stains, which show that there must be copper near. No. 4 is 7 fathoms north of No. 3 lode. This is a north underlie, the three former ones are south underlies. There has not been sufficient done on this lode to be able to give an estimate, or even an opinion of it. I cannot conclude without saying I believe this to be second to no piece of mining ground in the neighbourhood. There is another great advantage—we have the River Tamar within 2½ miles from us, which renders all the land carriage very easy. I believe, with economy, a small outlay will make this a lasting paying mine.

JOHN BUCKINGHAM.

West Prince of Wales, Feb. 7, 1867.—I have carefully surveyed this mining property, and beg to say that my long experience and practical knowledge of this extensive sett, for more than thirty years, has in some degree furnished me with sufficient reason to form an opinion of its merits and intrinsic value as a mining speculation, combined with the existence of four known lodes, productive of both tin and copper, running nearly parallel to each other, through the entire length of the sett, which is about 600 fathoms. I may further remark that it is situated in the parish of Calstock, on the southern slope of Hingston Common, and direct west from the Prince of Wales Mine, embracing within its limits all the same lodes, one of which is being so successfully worked in the before-mentioned mine, and found to yield rich copper ore to the amount of £50 per fathom, and is undoubtedly a prize of 1867. The stratification in which those lodes are embedded is clay-slate, precisely the same in character as that in the adjoining mine, proximating the granite range of Kitt Hill and Hingston Down. The different lodes already discovered are represented as Nos. 1, 2, 3, and 4, which are all in easy distance of each other, so as to be thoroughly developed, and drained by one effectual steam-engine of about 60-horse power. Hitherto the principal operations have been confined on No. 3 lode, on which an adit level has been driven 160 fathoms from the eastern valley, and a small shaft sunk on the brow of a hill to communicate therewith, which is about 18 fms. deep. The greater portion of this long drive is exceedingly shallow; nevertheless, the lode in various places presents such unusual indications of success, that it influenced a party of poor working miners to obtain the sett, who commenced working below the level of the adit, from which some considerable amount of tin was returned. But for the want of means and proper machinery they were compelled to abandon this point, which has not since been resumed. All the other lodes have been operated upon very limited, such as a shallow adit driven some short distance on its course, and by adit pits in different places, showing their distance, course, and character, which is very satis-

factory, presenting all the elements of early success. The facilities for transit, and easy access to and from the mine, with all classes of materials and minerals, are exceedingly favourable, from the fact that the turnpike-road leading from Callington to Tavistock passes through the sett, and being within a distance of 2 miles from the navigable river Tamar. Looking at the general position of the property, in which are so many very promising lodes, as already described, with its close proximity to the granite range of Hingston Down, and the adjoining rich discovery of ores in the Prince of Wales Mine to the east, and also the most flattering prospects in Wheal Mary Florence Mines to the west, I am inclined to think that there can be no reasonable doubt of finding this to be a valuable property.

Dated Wheal Edward Mine, Calstock, Feb. 8, 1867.

NORTH WHEAL CHIVERTON SILVER-LEAD MINE.

LEAD MINE.

In 3000 shares.

On the Cost-Book System.

A Committee of Management will be chosen at the first meeting of shareholders.

BANKERS.

The Alliance Bank (Limited), London.

LONDON MANAGER.

George Noakes, Esq., 181, Gresham House, Old Broad-street, London, E.C.

LOCAL AGENT.

Captain William Hancock.

SOLICITOR.

Tufnell Southgate, Esq., 7, King's Bench Walk, Temple, London, E.C.

BROKERS.

Messrs. Staples and Bretherton, 4, Royal Exchange Avenue, London, E.C.

PROSPECTUS.

This mine is situated in the best and most productive lead mining district in Cornwall, and is a little to the north of the justly celebrated West Chiverton Mine.

West Chiverton may be termed the richest and most profitable silver-lead mine in Cornwall, and is now paying dividends to the fortunate shareholders at the rate of £20,000 to £25,000 per annum (or £7 to £8 per share).

West Chiverton was sold about April, 1863, to some three gentlemen, for the sum, it is stated, of £30,000 (or at the rate of £10 per share), and was afterwards divided into 3000 shares. It is now selling at £60 to £62 per share, or (say) £180,000 to £186,000, and at one time (since 1863) attained the high figure of £85 to £90 per share, or upwards of £250,000 to £260,000 for the mine.

From the time of the purchase, about April, 1863, at the rate of £10 per share, the mine quickly and greatly improved, for in October—only some six months after the purchase—a dividend of 15s. per share, or 2250s., was paid to the shareholders; and at the end of December, in the same year (1863), the shares had risen to £54, £55 each, or £162,000 to £165,000, for that which had been purchased only some eight months previously for about £30,000. Since this period the mine has gradually and wonderfully improved as depth has been attained—i.e., the 80 fm. level (same level as North Wheal Chiverton is now at) down to their present rich part, the 100 fm. level. At the 80, in West Chiverton, a rich lode was cut into, worth from £50 to £70 per fm. It may be well also to state that, in addition to the great outlay made in machinery, &c., on West Chiverton (out of profits), since 1863, the total amount paid in dividends up to the present time is stated to be £17s. 6d. per share (or £52,125), which, with the balance to the credit of the company, is more than double the amount paid for the purchase of the property only some four years ago; and, as before stated, the market value of the mine is now £60 to £62 per share, or £180,000 to £186,000, with every probability of increasing the quarterly dividends to £3 per share, or £36,000 per annum.

East Wheal Rose and the Old Shepherds Silver-Lead Mines (alluded to in the agents' reports), on a comparatively small outlay, are said to have realised the enormous profits of about £300,000 to £400,000; and the shares in the former mine (East Wheal Rose) advanced from about £50 to £1000 and £1200 per share. As will be seen by the reports, the opinion is that "the lodes which proved so productive in Old Shepherds Mine are the same lodes worked on in North Wheal Chiverton."

There are several well-known productive lodes in North Wheal Chiverton, from which considerable quantities of lead and blende have been raised and sold, and this only from a comparatively shallow depth, giving indications, bordering almost on a certainty, of great productiveness by a deeper development, and driving of the present 80 fathom level, the strata being identical with that of West Chiverton and neighbouring productive mines.

Lead and blende ores are now being raised, and as the development of the mine progresses the returns of ores will be greatly increased. It will be observed by the report of Captain Nancarrow (of West Chiverton Mine), that in alluding to the 80 (or bottom) level, he says it is cleared for some 50 fathoms in length, and that the lode is some 6 feet wide, showing a decided improvement, as compared with the shallower levels, and for the entire length is of a masterly and promising character, and that many fathoms of lead ground in the back of this level (the 80) may be taken away at a profit to the company.

From the testimony of every practical agent who has inspected North Wheal Chiverton, it is inferred that, as depth is gradually attained, by sinking the shafts, and the driving of levels in new and unexplored ground, the lodes will prove highly productive for mineral, and that a rich and profitable mine will quickly be laid open.

The steam pumping-engine, machinery, pitwork, and dressing-floors, together with the work already done in and on the mine by previous adventurers, must have cost about £25,000 to £30,000 (or say about £10 per share—per 3000th), the whole of which is in good working order, and operations at the mine are now being actively carried on.

There are several shafts sunk, which has been the work of several years. The old shaft is down to the depth of 80 fms. from surface, and this is the greatest depth that has yet been attained. It is supposed to be about the same depth (taking the geological position of the two mines) at which West Chiverton became so productive and highly profitable.

The steam pumping-engine is a 50-in. cylinder (a new one about three years ago), and is capable of pumping the water to a very great depth.

From its proximity to West Chiverton, now selling at £60 per share, or £180,000; Chiverton Mine, selling at about £8 per share, or £24,000; Chiverton Moor, selling at about £8½ per share, or £25,500; and Great Retallack, selling at about £2½ to £4 per share, or £17,000 to £18,000, and having similarly favourable conditions for the production of large quantities of lead and blende ore, it is only reasonable to expect that North Wheal Chiverton will prove equally as productive as the other mines in this district when properly developed. Indeed, there is scarcely a doubt that discoveries of no ordinary importance will be met with, and that at no very distant period.

The last company was, as is well known, carried on under many and great disadvantages, and was obliged to suspend operations just at a time when, as it would appear, they were about to meet with great success.

With a view of vigorously, and at the same time economically, prosecuting operations, the adventure has been reconstituted by the present proprietors, on the Cost-book System, in 3000 shares (same number as the above-named Chivertons), upon which a call of £4 per share has been made; which sum, after paying the present proprietors for the engine, machinery, pitwork, dressing-floors, and all expenses incidental thereto, including all the costs and liabilities up to the end of March, 1867, will leave the sum of £5000 to the credit of the company, which sum, with the large development above described, competent mining authorities consider sufficient to place it in a profitable position.

The present proprietors, having already received applications for a number of shares, have determined to receive applications from the public for a limited portion only of the remainder, at £4 per share, £2 per share to be paid as deposit on application, and the remaining £2 on allotment, and if no allotment is made the deposit will be returned without deduction.

Priority will be given to the earliest applicants for shares.

The reports on the mine (and extracts of reports), by the best practical mining authorities in Cornwall (including the managers of West Chiverton, Chiverton Moor, and Chiverton Mine, and likewise the manager of Great Laxey Mines, &c.), show that highly remunerative results may be confidently looked for (at an early period) from prosecuting the operations with vigour.

A Committee of Management will be elected at a meeting of shareholders, to be held within one month after the closing of the share list.

Applications for shares, in the form appended, accompanied with the deposit, may be made either to the Alliance Bank, London, Liverpool, and Manchester; or to the brokers, Messrs. STAPLES and BRETHERTON; or to GEORGE NOAKES, Esq. (the London manager).

FORM OF APPLICATION FOR SHARES.

To the proprietors of North Wheal Chiverton Silver-Lead Mine.

GENTLEMEN,—Having paid to your bankers the sum of £. . . being the deposit of £2 per share on shares in the above mine, I hereby request you will allot me that number, and I hereby agree to accept such shares (or any less number you may allot to me), and to pay the remaining sum of £2 per share on allotment.

Usual signature

Name in full

Notices to Correspondents.

Much inconvenience having arisen in consequence of several of the Numbers being past year being out of print, we recommend that the Journal should be ordered on receipt: it then forms an accumulating useful work of reference.

SMALL BAY MINES.—Can any correspondent inform me whether or not the Small Bay Mining Company (Limited) has been wound-up, and the materials sold and lease surrendered?—C. E.

CHIVERTON MOON.—My attention has again been drawn to a report of this mine in last week's Journal from Wm. Tonkin. I stated some time since, and I beg to state again, that Wm. Tonkin is in no way officially connected with this mine.—R. Clogg: Parser.

THE NEW BITUMINOUS SUBSTANCE FROM BRAZIL.—Some 13 months since Prof. Archer introduced to the notice of the Royal Society of Scotland a new bituminous substance produced in Brazil, and imported into Liverpool as coal, which proved, upon chemical analysis, to yield a much larger percentage of oil than even the Torbane Hill mineral. Can any of your correspondents inform me whether this mineral has yet been turned to commercial use?—P. N.

MINEWRIGHTS.—We are informed that business was commenced long ago, and that the directors are at present in negotiation relative to an important property, which, if acquired upon suitable terms, will probably lead to very favourable results.

LEADY SILVER-LEAD MINING IN WALES.—“A. F.” (Goginan).—The discussion on this subject can now very fairly close. Each party has had full opportunity of expressing their views; while the very fair proposition of Capt. B. Parker, that those interested in the Vale of Rheidol Mine should have it investigated by some respectable agent of the neighbourhood, who is acquainted with the district, would seem to present the only satisfactory means of settling the differences of opinion as to the value of the property. If this report is forwarded to us it shall appear in the Journal.

Mining in California.—Please correct an error which appears in last week's Journal, by stating that the heading “Mining in Colorado” should be “Mining in California.” The letter referred to was written by General James F. Hall of the San Francisco Times (California), from the Silver Mountain, California: there are no such mines or districts in Colorado.—A. Z.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, MARCH 23, 1867.

GOVERNMENT INSPECTION OF COAL MINES.

THE INSPECTORS' REPORTS.

Mr. DICKINSON (Manchester District) reports that his district contained, during 1865, free from any great accident, and generally the provisions of the law were faithfully observed. With regard to the returns, showing the proportion of accidents and deaths to the number of persons employed and tons of coal raised, Mr. Dickinson says it is really no reliable means by which the exact number of persons employed and the tons of coal can be correctly ascertained for each year; and the accuracy of the numbers has to depend upon the information obtained, and the estimation made by each Inspector. He made application to each colliery for the actual average number of persons employed, and the tons of coal raised; and the numbers were almost identically the same as those of the previous year. The number of persons employed has been supplied to him in all cases, except eight; and as the total was almost the same as that of the previous year, the number may, therefore, remain unaltered. The number of tons of coal raised has been supplied to him in all cases, except three. The computed part being only one-twenty-third of the whole, so small that it cannot materially affect the general accuracy; and as Mr. Dickinson has himself some personal knowledge of each of the collieries, as well as the collateral information to guide him in the computation, the result may be taken as substantially correct.

Mr. HIGSON (West Lancashire and North Wales District) reports that 1865 was a very unfortunate year for his district. There has, however, not only been a much larger out-turn of coal at the collieries than were in operation in 1864, but many new mines have been since opened, at which alone, while bringing them towards a state of active operation, eight of the fatal accidents, causing the death of twelve persons of the number stated, have occurred. If, therefore, no new works for the extension of trade had been progressing, the number of fatal accidents and the loss of life would have been less in the year 1865, although the out-turn of coal in that year exceeded that of 1864 by 500,000 tons. It is also clear that an increased rate of coal occasions a corresponding increase of fatal accidents and loss of life, and that, according to the ascertained ratio of the district, there is one fatal accident for every 81,000 tons, and one life lost for every 69,000 tons of coal got and raised. The accidents were of every imaginable class, and extended almost to the whole catalogue of casualties. They have occurred from sudden falls of coal and stone, which prevail in the district in consequence of the strata having been broken by faults, &c., and by the workpeople neglecting to fix a sufficient number of props and sprags for their own protection; from defective machinery, from collapsing of shafts, from unprotected machinery, from falling into shafts from the surface through their own carelessness, from falling out of cages during ascent and descent, and from being injured by railway trucks when ground.

Mr. WALES (South Wales District) reports the details of the several accidents which occurred in his district. Referring to an explosion at the Cwmaman Colliery, Aberdare, on May 20, 1865, Mr. Wales remarks that this is the only clear case which has come under his notice where gas has been ignited by a proper safety-lamp, and goes to prove the great danger of allowing men either to work or pass, even with safety-lamps, where it is known the air is charged with gas. Alluding to the principal or important doors ought to be stationary, and not allowed to move with the hauliers, or leave their doors for any other purpose. The Act in regard to the prohibition of boys from working underground until they have attained certain ages (12 if not able to read or write, and 10 if able to read or write or attend school) is not, he regrets to state, so strictly carried out as it ought to be. The deaths of 25 out of the 27 classes of colliery accidents were caused by boys; and out of the 25 no less than 14 of the boys were only from 10 to 15 years of age, and for the most part engaged as boys. The practice throughout almost the whole of the collieries in the South Wales Valley is for the door-boys, generally only from 10 to 15 years of age, to be in front of the horses with the full and empty teams, instead of remaining stationary at their doors. Boys of such tender years are utterly incapable of performing such laborious work for 12 hours daily, he has no hesitations in stating, the chief cause of the fatal fatality under this head.

Mr. BROUGH (South-Western District) again refers to the subject of premature or unexpected explosions in blasting. He again warns miners of every description or class to make use of copper as much as they possibly can for blasting purposes. Of course, the drills or rods must be made of steel, but surely the “needle” can be of the harmless metal. Many of the workpeople already begin to comprehend the greater safety that copper affords, but until the owners and the men make it one of the special rules, or even one of their own bye-laws, this killing, blinding, and maiming will still go on. He finds it difficult to make any observations on the subject of education more explanatory or satisfactory than those contained in the reports of many previous years. Nevertheless, so many schools are to be seen in the colliery districts that he almost comes to the conclusion that we have come to the transition, if not to a more advanced state, as regards instruction. But, however abundantly these estimates may be dotted over all the coal fields, he still does not recognise the advance that may be considered commensurate with the existing means of education; the people themselves must put their shoulders to the wheel, whether or not there may be sectional differences amongst the parties teaching, whether those to be taught prefer work to learning, he is not well able to say. He keeps him as much out of sunlight as in it; therefore, he does not know what is going on in the schools, but fears the actual progress of mining population is not equal to the strong desire and original intention of the Legislature, and of the intelligent classes of the kingdom in general. For what he has here said, there is still a glimmering improvement, that was by no means apparent ten or a dozen years ago, and he would fain hope that it will continue to grow brighter. Increased knowledge really and truly means increased morality, and he trusts that those who have so faithfully struggled for a larger measure of improvement amongst the working classes in no great length of time, find that they have not striven in vain, but that their own will surely be followed by that complete enlightenment which so undid alone and only can confer.

Mr. MORTON (Yorkshire District) alludes at considerable length to “Miners' Petition” of March, 1865, and offers some important observations upon it. He considers there is scarcely any valid objection to the request that all coal got shall be paid for by weight, rather than by measure, and that the weight should be ascertained by a weighing machine, which is of dispute might be tested by the local inspector of weights and measures. The petitioners attribute the sacrifice of life in collieries and the want of a sufficient body of sub-inspectors, whose duty should be to mine the pits internally; and the petitioners request that a sufficient number of sub-inspectors be appointed to aid the present inspectors so as to render the mining more efficient, or to act in such manner as Parliament may direct. Mr. Morton thinks it would be advisable for the Secretary of State to increase the present number of inspectors, but he hesitates to recommend the appointment of what the petitioners call a “body of sub-inspectors.” The interference of sub-inspectors would probably be repelled by colliery owners and agents, whom their official opinions and suggestions would often not have sufficient weight and cogency. Serious misunderstandings and bitter controversies might

frequently be thus engendered, which would necessitate the authoritative and coercive interposition of the chief inspectors, and would tend more to weaken than to strengthen the legitimate functions and influence of the latter, and to retard the peaceful and successful administration of the law. He observes that the petitioners also complain that the constitution and practice of Coroner's courts, so far as they relate to accidents in mines, are so objectionable that justice is not secured to the petitioners; and, therefore, they desire that “not less than one-half of the number of jurors who form the panels in Coroner's Courts, shall be composed of operative miners.” To this Mr. Morton replies that it is almost superfluous for him to say that one essential requisite in an English jury is impartiality; but this admirable qualification is not likely to be obtained by enacting that six of the 12 jurors at a Coroner's inquest, on a colliery case, shall be operative miners. His own impression is, that if the jury consisted of respectable householders living in adjoining townships, rather than in the township where the accident occurs, and if all colliery owners, agents, and workmen were excluded from a panel, a more equitable result would be arrived at. It would, perhaps, be right and expedient also to empower the Coroner and jury summarily to fine or imprison mining proprietors, or officers, or labourers, who, by their culpable mismanagement or neglect, may have indirectly caused death in or about a pit. This would enable the law to return a verdict intermediate between “manslaughter” and “accidental death,” and if a pecuniary penalty were levied the money might appropriately be bestowed on the surviving sufferers.

Mr. EVANS (Derby, Nottingham, Leicester, and Warwick District) does not offer any suggestions, but directs attention to one of the most important cases in connection with accidents through faulty arrangements that can be desired. Two persons were killed at the ironstone mines of Messrs. Appleby, of Glasshouse Common, near Chesterfield; on receiving notice of the accident Mr. Evans made an inspection of the works, and attended the inquest. The winding arrangements are most complicated—a steam-engine is placed in the midst of a great number of shafts, and it gives motion to a horizontal drum, and by using a pair of bevel wheels it also works at the same time a vertical drum. On these drums are 17 ropes, and they lower and raise persons and materials from 16 separate shafts, and an incline plane, which are of unequal distances, from the drums, ranging from 40 to 350 yards and the depths varying from 40 to 70 yards. It appeared that on the morning in question 10 ropes worked from off the vertical drum and seven from the horizontal one. At the time of the accident five persons were descending two different shafts on empty carriages against loaded carriages in other shafts, and when within a few feet from the top the full cages suddenly reversed, fell to the bottom, drawing the men and carriages up the other shafts and over the pulley wheels; consequently, any shaft until it was wonderfully escaped by jumping out at the bottom. On examination of the vertical drum the shaft was found to be broken off in its bearing, and having no break on it no longer remained under the control of the engine-man. The shaft appeared to be of good material and workmanship, and he believes the fracture was caused by the unequal distribution of the weight and sudden jerks to the machinery. This extraordinary arrangement of winding machinery is, in Mr. Evans's opinion, unsafe to those employed in the mine. In no other district in England is such a system practised as a man having to work an engine to lower persons from different shafts at the distances and depths described, and further they are so arranged that only the tops of a few of them can be seen from the engine-house. This is not, however, an exceptional case, for others of a similar description are still at work in the county of Derby.

Mr. WYNNE (North Stafford, Cheshire, and Shropshire) reports that Shropshire has long carried on the best known system of propping—that of running a continuous line of timber along the face about half way between floor and roof, and fixing at frequent intervals diagonal supports from the straight timbers to the floor and roof respectively. He is sorry to say this plan is gradually giving way before the influx of strangers, and the natural tendency of the butty system to prefer present profits to safety from danger, which for the time are quite unforeseen and unappreciated until the loss of life or limb of a fellow-creature rouses them to a sense of danger.

Mr. BAKER (South Staffordshire and Worcestershire) reports a remarkable decrease in the loss of life in the coal and ironstone mines in his district; the average annual loss of life in coal mines, therein, in the first 10 years of colliery inspection to 1860 inclusive, 162.5; the annual average of the last five years to 1865 inclusive, 113.8; whilst the lives lost in the year 1865 were only 91. In connection with shaft accidents Mr. Baker refers to an accident at the Ward Colliery, at a pit at which a patent apparatus, invented by Mr. S. Bailey, to prevent overwinding, was attached to the band chain. On the day of the accident the cage was at the top of the shaft waiting for the usual signal to be lowered. At length the proper signal was given, and the engine started, and the cage descended the wrong way, and pulled the pulley, leaving the cage on the other side. The apparatus did not act properly; it had evidently thrust the cage askew, and the wire guides giving way doubtless caused the cage to miss the landing apparatus, and it was thus, with the boy, precipitated to the bottom. His experience has scarcely confirmed even his moderate anticipations of the beneficial operation of the legislative provisions for promoting the education of the children of miners. He fears, as he has stated in former reports, that so long as the children of miners are in the district, they will remain at an early age, the clauses in question (those of the existing Act) will mainly operate to divert juvenile labour into other channels. Probably no class of workmen are so ill-educated as miners, whilst scarcely any class, from the peculiarly hazardous nature of their employment, need education more. Legislation on the subject to be effectual must, he thinks, be of universal application.

The reports of Messrs. DUNN and ATKINSON contain only detailed references to the several accidents which occurred during the period. In Mr. Atkinson's district the Castle Eden Colliery and the Ryhope Colliery were alone worked with single shafts—the second shafts were being sunk, but the time allowed for completing the work had not expired when the report was made.

Mr. MOORE (East Scotland) reports that the Lanarkshire rules, which do not differ materially from the Fifeshire rules, except that the latter contain no provision for examining the working places before the workmen enter at the commencement of each shift. The arbiter did not order the rules officially proposed, but he made certain additions to the Fifeshire rules. The following is the most important:—“Colliers are expressly forbidden to proceed towards, or into, their working places at their pits, until they are satisfied that the working places have been examined, and are apparently safe to be entered. Until such intimation of the apparent safety of the pit shall have been made, colliers shall remain at the place or places assigned for that purpose.” These rules are now established at the colliery. He has endeavoured to introduce this important rule into the Fifeshire special rules, but has only partially succeeded. It is a rule so essential to discipline and to safety, that it is difficult to see why the masters should hesitate to adopt it. This rule seems to him to be applicable to all collieries, and, with several others, might, in his opinion, be made with great benefit—general rules, such for example as the propping of working places, as in the special rules of the North of England; the use of self-acting wickets at the surface, and gates on mouthings or openings into shafts; and the employment of onsets and pithead men when workmen are ascending and descending.

Mr. ALEXANDER (West Scotland) reports that from a familiar acquaintance with colliery calamities, and from a knowledge of the sufferings and privations which in many cases resulted from them, he has often thought what a blessing it would be if some more certain provision could be made for the widows and children of miners who by such distressing visitations are left destitute and unprotected. The question has frequently been mooted, but more directly as a consideration for the employers and employed than for the general public. It is doubtful, however, if a matter of such magnitude could be properly met by private aid. He was not aware that the owners of mines are illiberal, indeed in many cases they are quite the reverse; but independent of the desire to relieve the families of their unfortunate workmen, there are many of them so situated that they cannot do so. As a class, miners are not proverbial for habits of thriftiness; they marry early, and many of them are cut off suddenly in youth by accidents, or are otherwise disabled at a time when their families are young and helpless, and before they could possibly have had an opportunity to make any provision for them. The object is comprehensive—private charity cannot overtake it. He humbly submits, therefore, that as the products of mining are indispensable for us to keep in motion the industry of this country, and as fatal accidents in mines are unavoidable, that some public fund, or what would be more workable, and would not press upon the liberality of any class in particular, that the taxation of the country, either through some system of insurance or otherwise, should to a certain extent be made available for the support of the children of colliers who have met violent deaths in mines, until such children are 15 years of age, and also that some provision should be made for the needy and bereaved widows. In carrying out such a scheme there would, no doubt, be many difficulties, but there are not insurmountable. The Hartley Colliery Relief Fund was a practical experiment upon a liberal scale, and the same system of relief carried out in a general way could be greatly modified, and still be of incalculable benefit to many a poor suffering family.

INEXPLOSIVE GUNPOWDER.—An interesting account of gunpowder generally, and of other explosives, has just been published, as the introduction to a pamphlet containing the opinions of the English and foreign press upon the merits of the inexplosive gunpowder, invented by Mr. NEUMEYER, of Leipzig. The history of gunpowder from the thirteenth century to the present time is carefully given. It appears that Mr. Neumeyer's powder contains 75 parts of saltpetre, 6.25 parts of sulphur, and 18.75 parts of birchwood charcoal, the charcoal being soaked in soda-lye, and partially dried on canvas strainers. The charcoal is then reduced to powder, and incorporated in a moist state with the other ingredients. It will thus be seen that the mode of manufacture, as well as the ingredients used, have stood the test of practical use, whilst the field which exists for the sale of the inexplosive powder in the various mining districts in the North of England and Wales cannot be doubted, seeing the high favour in which Davey's safety blasting-powder is held amongst the miners of Cornwall and Devon. It is remarked that it should ever be borne in mind that when the full strength of the powder is required to be brought out the hole must be well tamped—the harder the better. And there need be no fear in doing this, as the powder cannot be ignited either by friction or pressure; and it is absolutely certain in its power when well tamped, as it is in its harmlessness when fired

in a loose mass. The pamphlet is particularly useful from the large amount of information upon the subject—in fact, all that is necessary for the general reader—which has been brought together.

GUN-COTTON.—In referring to the very interesting lecture delivered at the United Service Institution before the Prince of Wales and a large number of naval and military officers, by Mr. F. A. Abel, F.R.S., of the Royal Arsenal, Woolwich, it was stated in the *Mining Journal* of June 2, 1866, that experiments with a view to make certain improvements in the arrangement of material were then being made. One which the Messrs. Prentice, of Stowmarket, had introduced with good results was to moderate the action of the Gun-Cotton by weaving it in combination with ordinary cotton, thereby diluting, as it were, the material and moderating its action. Another mode in which he was conducting experiments was to reduce the Gun-Cotton to a pulp, and make paper of it, which was then formed into thick cartridges. These researches have now been practically applied by Messrs. Prentice, who now bring Gun-Cotton into the market as compressed pulp, possessing advantages which place it far above both ordinary Gun-Cotton and the other explosives hitherto in use. Gun-Cotton is prepared in the usual way, and after being well and thoroughly washed for a long period is put into the ordinary pulping-engine of the paper makers, reduced to a pulp, and in this state is moulded, cut into such lengths as will, when dry, give the exact charge required, and by hydraulic pressure is highly condensed, until 1 in. of the Gun-Cotton becomes equal in explosive power to 6 in. of powder. The charges are made in lengths, so arranged that five of them of any diameter are equal to 1 lb. of ordinary blasting powder, and they are supplied in quarter, half, and whole cases, so that a comparison in cost and the saving effected may readily be made. They can be passed into the hole with great ease, and are reported to be safer than any other explosive material. This highly condensed form, from its enormous explosive force, offers many advantages in hard rock, and very considerably reduces the labour of boring, and the system of pulping enables the manufacturers to adapt the material to any density which may be necessary to suit the varying nature of the rock to be blasted, so that coal, slate, marble, and large blocks of granite may be cut instead of shattered. The charges are fired in the ordinary manner, either with fuse or primer-hole; there is an entire freedom from smoke, and a much greater purity of air, which is most important in such cuttings. Any indication of reek is a proof that more Gun-Cotton is being used than is required for the work, and is a simple reminder for increased economy.

FOREIGN MINING AND METALLURGY.

The shareholders in the Creuzot Works Company have decided on carrying the maximum amount of the reserve to 200,000. A loan of 200,000, is also to be contracted, while M. Henri Schneider, son of M. Schneider, has been appointed co-manager. Iron has given rise to few transactions at St. Dizier; rolled from charcoal-made pig has realised 87. 16s. to 91. per ton; ditto from mixed pig, 87. 8s. to 87. 12s.; ditto from coke-made pig, 77. 12s. to 77. 16s. per ton. Charcoal-made pig has realised 47. 9s. 2d. for some small lots without importance; half coke mixed pig is quoted at 37. 16s., and coke-made pig has made 37. per ton. In the Moselle, contracts for white refined pig have been concluded at 27. 17s. 6d. per ton by furnaces of the Meurthe, the Moselle, and Longwy; other affairs have been concluded at 37. per ton for grey and white pig. Upon the whole, the state of affairs has not improved, orders being generally lacking; it is hoped, however, that a revival will shortly take place. Meetings are announced as follows:—J. F. Call and Co., March 21, at Paris; Loire Mines Company, March 22, at Paris; Kilm Collieries Company, March 25, at Paris; Montrambert and Beauverdi Collieries Company, March 26, at Lyons; Mokta-el-Hadid Magnetic Iron Minerals Company, March 29, at Paris; Chazotte Collieries Company, March 30, at Paris; Kefoum-Theboul Mines Company, March 30, at Marseilles; Carmaux Mines Company, April 3, at Paris; Montfoux Coal Mines Company, April 13, at Paris; Grand Combe Mines Company, April 13, at Paris; and Denain and Anzin Blast-Furnaces and Forges Company, April 26, at Paris.

Belgian metallurgical industry presents great depression. The blast-furnaces which have remained lighted see their stocks increase to an alarming extent, and the rolling-mills which are completing old orders see the moment arrive when they will absolutely want work. English pig continues to be presented in Belgium at rates to which the Belgian blast-furnaces cannot descend; hitherto founders had only utilised this English pig, but now refined pig also presents itself, a circumstance which is regarded as increasing the difficulties which stare Belgian metallurgists in the face. In railway plant the stagnation is as complete as in metallurgy. M. de Dorlodot have concluded a contract for 7000 tons of rails with the Kiew and Baltia (Russian) Railway Company. Meetings are announced as follows:—Sacré Madame Colliery Company, March 25, at Antwerp; Péronnes-lez-Blinche Colliery Company, March 26, at Brussels; Eschweiler Mines and Foundries Company, March 28, at Blankenheide-Stollberg, near Aix-la-Chapelle; Rhine Copper Foundries Company (in liquidation), March 29, at Cologne; Vallée du Pignon Collieries Company, March 31, at Roux, near Charleroi; Rhein, Main, and Lahn Mines and Ironworks Company, April 1, at Darmstadt; Bonne-Espérance and Batterie Collieries Company, April 1, at Liège; Lower Sambre United Collieries Company, April 2, at Taminé; Paradis, Avroy, and Boverie Colliery Company, April 4, at Liège; Val-Benoit Collieries Company, April 8, at Liège; Bois-Colliery Company, April 11, at Quaregnon, &c. The Geneva Scit Mines Company is paying a dividend of 4s. 6d. per share.

It appears that the unfortunate Spanish Ciudad Real and Badajoz Railway Company has not been able at present to carry out its proposed branch to the Belmez coal basin, and that it, consequently, still loses the large and valuable traffic which it hoped to derive from this source. The Belmez coal basin has a length of about 30 miles, and an average width of 2½ miles. It comprises an immense quantity of coal, suited for all the purposes required by industry. The collieries have been visited by order of the Paris Société Générale by an eminent French mining engineer, who indicated the richness of the basin, and the facilities of extraction; and on the report of this gentleman, the Parisian establishment appears to have decided on participating in the formation of a company for working the collieries. The basin is only 39½ miles from the Ciudad Real and Badajoz line, and the branch which remains to be constructed slopes downwards from the colliery, thus assuring facility and economy of transports. As regards the outlets which the Belmez coal might obtain, it may be observed that foreign coal is burdened on entering Spain with a duty of 7s. per ton, whereas coal from Spain, at its flag, is exempted from all duties. The quantity of English coal consumed in the South of Spain, at its price, exclusive of import duty, is estimated as follows:—30,000 tons, price Cadix 17. 10s., used for the Cordova and Seville and Cadiz Railways, the navy, gasworks at Seville, Xeres, and Cadiz, and the wine trade of Xeres; 40,000 tons, price 17. 19s. 2d. per ton, for the lead works of Linares and the Caroline; 17,000 tons, price at Malaga 17. 11s. 2d. per ton, railway purposes, and the works of Vélez Malaga; 65,000 tons of coke, at 27. 3s. 4d. per ton, for the lead works of Carthagena, together with 6000 tons of coal for the royal navy at 17. 13s. 8d. per ton; 60,000 tons, price at Alicante 27. 10s. per ton, for the Madrid, Saragossa, and Alicante Railway; 18,000 tons, price at Valencia 17. 13s. 8d. per ton, for the Almansa, Valencia, and Tarragona Railway, the navy, &c.; and 90,000 tons, price at Lisbon 17. 10s. per ton, for the service of the Portuguese railways, ironworks, &c. Such is the present consumption in the radius which the Belmez collieries can supply. In the centre of Spain—at Madrid, for example—the price of coal amounts to 27. 4s. to 47. per ton; and on these terms consumption, and especially industrial consumption, must be necessarily restricted. How can enterprise think of working the mines which abound in the Sierra Morena and the Sierra Nevada when the price of coal amounts to 27. 8s., 37. 4s., or 47. per ton? But the Belmez coal once largely worked, industry would soon expand. Thus the argentiferous lead mines of Estramadura, which have been abandoned since the days of the Romans, as they had attained the level of waters which could not be exhausted by primitive processes, would be again brought into working as the Spanish combustion together we brought down to 16s. or 17. per ton, while English coal now costs at the same points 47. 18s. to 67. per ton. Siderurgical enterprise would also be created, and even at Belmez, as the basin comprises abundant minerals of carbonated iron, and a little to the south of the basin olivine minerals, giving 70 or 80 per cent. Pig could be produced at Belmez, it is stated, at 47., and rolled iron at 87. per ton, while English iron sells at 207. to 247. per ton in the locality.

The Havre copper market remains quiet and stationary; the tendency is more and more feeble for Chilean and disposable, and there are scarcely serious buyers above 757. per ton, while transactions have been extremely limited. There has been no striking movement at Paris; the market has closed at the following rates:—English, 827.; Chilean, 777.; and Corocoro mineral, 807. 10s. per ton. A lot of 208 bars of Peruvian has been sold at Bordeaux at 877. 12s. per ton. The Marseilles market remains quiet, while the article displays a downward tendency; Toka is quoted for consumption at 807.; Spanish, 767.; refined Chilean and Peruvian, 887.; rolled red copper for sheathing, 987.; yellow ditto, 807. per ton. The past week was one of almost complete insignificance upon the German markets; at Cologne prices remained without change; at Berlin, in consequence of the advices received from London, there was a little more firmness; at Hamburg former rates have been maintained, but have been regarded as almost nominal. Since it has become known that the quantity of tin which is about to be offered for sale in Holland is much below the ordinary average, an exceptional activity has prevailed on the regulating markets. A letter from Amsterdam states:—“Affairs in Banca tin have been extremely important this week, and the position of the article is considered to be very favourable. Annexed are details of the sales effected on our market during the last few days—2000 blocks at 54 1/2 fls., 2500 blocks at 54 1/2 fls., 1000 blocks at 54 1/2 fls., 1700 blocks at 54 1/2 fls., 250 blocks at 54 1/2 fls., 400 blocks at 54 1/2 fls., 1700 blocks at 54 1/2 fls., 1500 blocks at 54 1/2 fls., and 1100 blocks at 55 fls. Sale prices have since fluctuated between 54 fls. and 55 fls., at which terms the article is now maintained. Some parcels of Billiton still at sea, and estimated at 900 tons, have been sold at rates which have not been divulged, but which are supposed to be 54 fls.; 700 blocks of disposable have found purchasers.” At Amsterdam the number of transactions has also been numerous. Other centres have reflected the good tone of the markets of Holland and England, and the article has generally risen. At Paris, Banca has been very well sustained at 947., and Straits at 907. to 927. per ton. At Berlin and Cologne the tendency

has been favourable; at Hamburg there has been a better demand, and the various qualities of tin have experienced an advance. At Stettin, Banca has been somewhat sought after. At Paris rough French lead has remained quiet at 22½ s., while Spanish has made 2½ s., per ton. At Rotterdam, Stolberg and Eschweiler have made 11½ fls., and various German marks 11 fls. The article remains without change at Hamburg, being only dealt in in small quantities. At Berlin, Saxon and Tarnowitz leads have been a little more sought after. The Cologne lead market has been quiet. There has been a good current of transactions in zinc. The German markets have become more quiet, but former rates are sustained. Advice from Breslau report no very striking transaction. The Hamburg market has presented little animation; nevertheless, notwithstanding the absence of demand, holders have maintained previous quotations. At Paris the demand has been restricted; the article, nevertheless, maintains itself firmly at 22½ l., to 23 l., for rough Silesian zinc, and 22½ s. to 22½ l. for zinc from other sources.

In dealing with French affairs we ought to have noted that the Carvin Colliery Company (Pas-de-Calais) is issuing 2000 obligations of 102 each, redeemable at 117 4s., and bearing an annual interest of 6 per cent. The obligations are issued with interest on the sums paid-up from Sept. 1, 1867. The first instalment of 2½ l. is to be paid-up Sept. 1, 1867, and the fourth and last, March 1, 1869. The Fives-Lille Company (Nord) is issuing 15,000 obligations, of 161 8s. each, producing an interest of 19s. 2d. per annum.

REPORT FROM SCOTLAND.

MARCH 20.—There was some little merriment on 'Change on Monday, when the *Mining Journal* was unfolded, and the eyes of the brokers lighted on Messrs. Shaw and Thomson's Circular, narrating that "in future" speculation was to be "discouraged by the Scotch ironmasters and shippers." It is true that this market is entirely free of speculation at the present time, but all that is wanted to give it life and buoyancy is a little of that speculation which the dealers are (without foundation) said to have discarded. On Monday the market opened with some little stir, which a local contemporary unwarrantably described as a "panic;" but the fuss arose from the misstatement in the Circular of the firm named, and was allayed when attention was drawn to the Glasgow Correspondent's more reliable report. During this week the Pig-Iron Market has been extremely flat, without any accountable cause, and, beyond the supposition that buyers are of opinion that pig-iron may, ere long, be had for nothing, there is little to account for the present depression. Stocks are heavy, buyers are shy, and prices are falling; wages are to be reduced, the furnaces are to be re-lighted at the end of this month—at least, so say some "knowing ones," and iron will be bought before summer is in for "an old song." It will, undoubtedly, take some extra demand to give prices an upward impetus just now; but, if an "ordinary spring" demand were to set in, nothing would prevent an increase of 5s. a ton on present quotations. During the last few days the fall has been fully 1s. 6d. a ton. To-day at the opening 51s. 9d. cash, and 52s. a month, was taken; but the market got weaker, and 51s. 6d. cash, and 51s. 9d. a month, was readily received for about 3000 tons, closing sellers, buyers shy, and asking a further reduction of 1½d. per ton. The pig-iron exports during the week are about equally balanced between foreign and coastwise, the quantity being 11,430 tons, against 10,755 tons in the same week of 1866. Finished iron is worse than it was a fortnight ago, there being fewer orders, and the rates offered are even under the depressed quotations then current. Plates and angle-iron are a little more enquired for, but the prices offered are not profitable. Ironfounding is tolerably brisk; but the brass and coppersmiths are only partially employed. Coals are cheaper this week, with a curtailed demand and lessened shipments, 11,215 tons being the quantity for the week just ended, against 17,305 tons in the corresponding week of last year. Coalmasters continued to be annoyed by the factious opposition of their workers, under the leadership of men who have succeeded in obtaining a Royal Commission to enquire into (with the view of legalising) "Trades' Unions." It would, indeed, be well if the working classes, who put so much faith in Trades' Unions, had spread out before them a catalogue of what these institutions have achieved for them in "lamentation and woe."

By the authority of the Conference of Miners, held here ten days ago, a county delegate meeting of miners is to be held in Hamilton to-morrow, at 10 A.M., and a general meeting at noon. The circular summoning the meeting is signed by Mr. A. McDonald; and the miners of "Larkhall, Stonehouse, Quarter, Hamilton, Baillieston, Holytown, Glasgow, and Aldrie," are warned that, as "the weal of ourselves and families are in the balance, do not be careless or indifferent." There is every probability of a large meeting, and those who attend will be met of a day's pay, which should have gone to the education or comfort of their families, and in this way the unfortunate miners are made rich. Meetings continue to be held, with the view of securing short time (eight hours a-day) in various districts.

The case of Calvin (metal broker) v. Dixon (ironmaster), which has been adversely settled for the pursuer, is, we understand, to be taken to the House of Lords. The decision has given great dissatisfaction to the trade here. Other cases of the same nature are to be brought before the Court of Session, but are to be put before the Court in a new light.

Shipbuilding continues rather dull at all our shipyards, and only one or two launches have taken place this week. Messrs. Wilson, Sons, and Co., Hull, have had a screw-steamer launched for their Baltic trade, named the *Cato*, measuring 217 x 26 x 16, with direct-acting surface-condensing engines. The *Rusla*, described last week, was launched to-day without accident, and was gracefully named by Mrs. Campbell, of Blythwood, as she took the water.

SHAW AND CO.'S PARAFFIN CANDLEWORKS, GLASGOW.—This establishment, which consists of a square of five buildings, is situated in Shuttle-street, Glasgow. The other day we were shown over the works by the senior partner, and had an opportunity of witnessing the manufacture of all kinds of candles, and the crushing and refining of tallow, lard, &c. As our object was principally to see the processes by which the crude paraffin was prepared for candlemaking, our attention was principally directed to that object, and the *modus operandi* may be shortly stated thus:—When in a crude state paraffin has a dark peaty hue, and while flaky is also somewhat fibrous. First, in the refining process the crude material is subjected to a washing in spirits, which separates the paraffin from the oleaginous products in combination with it. It is next cooled, and pressed to take out the remaining oily matter which it may contain, and also any portion of the spirits with which it may be permeated. When advanced to this stage of refinement, the paraffin undergoes bleaching, by the agency of sulphuric acid, in large coppers, heated to 100° Fahr. by steam conveyed through the mass by means of tuyeres, the proportions being one part of sulphuric acid to two of paraffin. During this process, and in order that the acid may thoroughly penetrate the paraffin, a constant motion is kept up, not by the common device of iron agitators, but by the novel agency of air, ingeniously introduced. After this has been accomplished, the liquid is drawn off into another vessel, and is allowed to settle for about eight hours, when the formerly dark brown flakes assume a pearly whiteness. Having now arrived at the final process, the paraffin undergoes a last purification by being washed in an alkali, after which it is "settled down" with bone-char, and cast into solid squares, in which state it remains till it is again liquified for candle-making. The number of hands employed at this work is considerable; and the quantity of paraffin used per week averages 5 tons. The almost inodorosity of paraffin candles when compared with tallow, and their inexpensiveness as contrasted with wax, while they excel both in the brilliancy and clearness of their light, is a recommendation of some value.

REPORT FROM NORTHUMBERLAND AND DURHAM.

MARCH 21.—The weather continues extremely boisterous, and excessively cold; the weather in the North Sea having been dreadful, causing loss and damage to many ships, and also a lamentable loss of life in some cases. Under such circumstances it cannot be expected that the usual export and import trade of the north-eastern ports can be proceeded with; the movements of shipping have, indeed, been extremely limited. The Coal Trade still shows signs of regular expansion, and workmen's houses are in course of erection at various places. Tenders are required for the building of a number of cottages at the Haswell and Shotton Collieries, where extensive additions are in progress. The price of house coal has risen, in consequence of the extreme cold and the obstruction to shipping, but other classes of coal remain as before; and at some of the steam coal collieries, and coking coals also, stocks are beginning to accumulate.

A case of some interest to ironworkers and masters has been tried at the Gateshead County Court. John Graham was charged by Mr. Roberts (Frazer and Roberts) with leaving his employment without giving any previous notice, the rule of the establishment being that a fortnight's notice be given, and printed notices to this effect are put up at the works. The charge was made on behalf of Mr. Frazer and Co. by Mr. Stewart, and the defence was conducted by Mr. Joel. The defence was that sufficient work was not provided by the plaintiff for the defendant, only enough being found for three days' employment per

week. A good deal of discussion ensued on this point, which appears to offer considerable difficulty, the magistrates giving the opinion that a contract could hardly be binding unless full employment was provided. However, the man was ultimately ordered to pay the costs of the case, and it was understood that he was to return to the employment of Frazer and Co., and that the engagement was to be terminated in a legal way.

The application on the part of the ironmasters for a reduction in the rates of railway haulage has not as yet produced any fruit; the question is, no doubt, a *grubus* one, and the railway directors can hardly be expected to decide at once in a matter involving a reduction in the amount of their revenue, especially as at the present time demands of a very serious kind on the part of a class of their workmen for an advance in the rate of wages are to be met. This vexed question as to the wages and hours of working of the engine-drivers will, no doubt, have to be settled before serious attention can be given to the very reasonable request of the ironmasters, that their rates be revised, and, if possible, reduced.

Mr. Robert Watson, jun., assistant engineer at the Black Boy Colliery, has been presented with a gold watch and case of drawing instruments, as a testimonial of esteem, on his leaving for an appointment at Seaton Colliery.

SPECIFICATION FOR THE PREVENTION OF EXPLOSIONS IN COAL MINES, &c.—Mr. W. R. Riddell, of Walker, has sent us the following proposed plan or scheme for perfectly and sufficiently ventilating coal mines and other subterranean workings:—He proposes to use steam-power at the surface to drive a large air-engine, with air receiver and pipes, &c. (similar to that used for a blast-furnace in the smelting of iron ore), which would be more certain than fan-blasts for forcing a strong air current through the workings, down either a bare shaft, or piped or boxed for conveying the strong air currents if such shaft need be used for drawing or pumping purposes, but would recommend an independent downcast shaft for the purpose, and then such shaft could have a wide tower, say 5 yards inside, and sufficient height, clear of impediments, and a large moving cowl at the summit, open to windward, for the free ingress of strong winds as an auxiliary, which would relieve the engine for repairs, &c. The top of the downcast shaft to be provided with a large trap-door, capable of being opened during strong winds; and the coals and men's time now consumed at the furnace below to produce imperfect ventilation could be applied to the working of the blast-engine at the surface, and would cause the workings to be conducted with safety and good light. By having sufficient fresh air sent down, and split and divided by artificial means, under the supervision of the mining engineer, it would admit of gasworks at the surface to supply the underground workings with street lamps, as there would be no danger of explosions, through the gas or foul air being sufficiently diluted and expelled up the upcast shaft; by using a blast cylinder of sufficient size to an independent downcast shaft, would answer all the necessary purposes without an underground furnace or exhaust fan-blasts. The blast cylinder can have either a spiral screw or piston.—*Newcastle Daily Chronicle*.

REPORT FROM MONMOUTH AND SOUTH WALES.

MARCH 21.—There is no material change to note in the continental enquiry for iron, but few orders being as yet offered. From the East Indies fresh contracts are looked forward to, and on South American account a little revival is considered probable. In a previous report it was announced that no doubt was entertained in this district of the passing of the new American Tariff Bill, and pretty nearly all parties had made up their minds to an almost entire cessation of demand from the States once the new Tariff came into operation. As might, therefore, be imagined, the telegram in the daily papers announcing the virtual defeat of the Bill, for, at least, the present session of Congress, proved an agreeable surprise, and strong hopes are now entertained that for many months to come there will be a fair trade doing with the States. It cannot be expected that the exports to that country will keep up to what they have been since the commencement of the year, for it was well known that a large portion of the iron sent out was for storing in the warehouses, in anticipation of the Tariff Bill passing, and the holders would then have the benefit of any advance in prices. No doubt some of these speculators will be greatly disappointed, for they anticipated making large profits through the enforcement of additional import charges. Home business continues unsteady, and no one seems to be able to give a reliable opinion as to the future. One day a gleam of hope turns up, and the next it is again dissipated by uncertain rumours. The difficulties of the railway companies, and they seem to be increasing, are the chief cause of this continued dullness, and until they are removed there is no hope of anything like a tangible degree of improvement taking place. For pig-iron there is a slow sale. The iron foundries are a little better employed. The demand for Steam Coal is better from some of the continental markets, and the heavy stocks which had accumulated at foreign stations are evidently considerably reduced. Barely an average quantity is taken by the Mail Packet Companies, and the shipments at Birkenhead keep about the same. Want of tonnage is severely felt, the long-continued easterly winds having prevented a large number of vessels from coming up channel. The heavy falls of snow have also obstructed the inland traffic. Coastwise there is a moderate demand for house coal, but proprietors find it difficult to keep the collieries going, owing to the great scarcity of vessels.

An interview took place between the Monmouthshire directors, the freighters, and the directors of the Newport Dock Company, on Tuesday, in reference to the extra 1d. per ton attempted to be charged by the railway company for certain dock traffic. Before any discussion took place, Mr. Crawshaw Bailey, M.P., announced, on behalf of the railway board, that they had determined on adhering to the extra penny tonnage, and, in consequence, the interview terminated without any arrangement being arrived at. The freighters have expressed a determination not to pay the additional tonnage, and some of them are disposed to test the validity of the charge.

The Ebbw Vale meeting passed off satisfactorily on Tuesday, the various points in the report of the committee recently appointed being fully explained, and a vote of confidence was passed in the board of directors. A limited company has been started for the purchase of the Van Colliery, being part of the estate of the late Mr. John Van Colliery and Coal Company (Limited). A favourable arrangement has been made for the purchase of the property, and several mining engineers of standing give it as their opinion that the colliery is capable of returning large profits.

At the Monmouthshire Railway and Coal Company meeting, on Wednesday, Mr. Crawshaw Bailey, M.P., (the Chairman), in moving the adoption of the report, said the decrease in the amount of dividend was attributable to the depression which prevailed in all branches of trade. Mr. Cartwright condemned the purchase of the Brecon Canal, but, with this exception, he congratulated the shareholders on the sound position of the property. The withdrawal of the Sirhowy Bill would, he hoped, lead to the acquiring of that line by the Monmouthshire Company. The Chairman said a committee of the board had been appointed to wait on the Sirhowy proprietors, in order to see whether they could come to an arrangement to lease the line. Mr. Lyne censured the board for their treatment of the freighters, and as the representative of a large wharf proprietor, he warned them that the policy adopted might lead to serious difficulties. After some further discussion, the report was adopted, and a dividend at the rate of 3½ per cent. per annum was declared for the half-year.

WILLIAMS V. LEWIS.—This was an action brought by the plaintiff at the Glamorganshire Assizes against the defendant for damages in respect to the non-fulfilment of certain covenants in a mining lease of the Graig Colliery, near Merthyr. The lease was for 99 years, 30 of which had expired, the head rent being £1000 per annum, to merge in the royalty. The extent of the taking was 25 acres. Plaintiff claimed the fulfilment of the terms of the lease, while defendant maintained that he could no longer work the colliery, the coal having become unmarketable. For the plaintiff, Mr. Wm. Adams, Mr. John Moody, Mr. Evan Daniel, Mr. Bowen Hapell, Mr. Edward Hayhurst, Mr. J. T. Wightman, Mr. Bedlington Kirkhouse, and Mr. W. H. Rowland were examined. Their evidence went to show that in the seams worked a large quantity of coal had been left behind, and they were of opinion that from 70 to 80 tons per day could be worked and sold. The upper veins and the lower veins had not been touched. For the defendant, it was held that he was not obliged to work all the seams, and in the veins that had been worked the coal had been turned out in the usual manner in which collieries were worked in Glamorganshire. Mr. Richard Hapell, Mr. Curnew, Mr. Bates, Mr. Bedlington, Mr. T. Forster Brown, Mr. Rees, and others were examined in support of the defendant's case, and they gave it as their opinion that the colliery had been worked properly, and in accordance with the mining custom of Glamorganshire. Owing to the quality of the coal having deteriorated, there was no sale for it, and the colliery could not be carried on except at a great loss; 25,000 had been paid by the lessee to the plaintiff in 30 years, and there was no complaint of the improper working of the colliery until the royalty fell below the fixed rent. The jury returned a verdict for the defendant.

SOUTH WALES INSTITUTE OF ENGINEERS.—The next meeting of members will be held at the Castle Hotel, Merthyr, on Wednesday, when the following papers, previously read, will be discussed:—"On the Duration of the South Wales Coal Field," by Mr. Bedlington;—"On the Cornish Engine," by Mr. Loam;—"On Mechanical Ventilation," by Mr. G. Cope Pearce;—"On the Structure of Iron," by Mr. W. Vivian;—"On the Port of Newport and its Coal Field," by Mr. Bassett;—"And the following papers will be read and discussed:—"On Pumping and Winding," by Mr. G. Cope Pearce;—"On the Coal Brasses of the South Wales Basin," by Mr. W. Adams;—"On the Tillery Coal Seam and Workings—Abertillery," by Mr. T. Dyne Steel, C.E.;—"On Davies' Self-Acting Steam Striker," by Mr. D. Davies.

FOREST OF DEAN.—A speculation, which it is hoped may turn out lucrative, has just been entered upon at Whitcroft, near Parkend, by a company under the appellation of the Compressed Coal Company, whose object is to manufacture some kind of patent fuel. It is astonishing how much a concern has not been established before, seeing the almost mountainous heaps of slack and surplus rubbish containing a high percentage of inflammable matter in the district. It is also considered highly probable the company will erect a furnace or furnaces at this place. An extensive and valuable property, and adjacent to the Severn and Wye Railway, has been purchased, and the company, it is said, is under the auspices of the Gloucestershire Bank. Should the concern go on favourably it will give an impetus to labour, and greatly benefit this side of the

Forest. The Tin Trade at Lydney, Parkend, and Lydbrook is by no means so satisfactory as it was a fortnight ago. Orders are slack, and prices easier. There being little or no stock at either of the works, it is not likely, should the trade not revive for a week or so, that the men will be put on shorter time. In iron there is no change to report. The matter of the railway authorities refusing to grease the trucks used for the conveyance of minerals from this side of the Forest is without alteration. The cost is computed at about 17 per truck per annum. In the aggregate it amounts to a considerable sum, but divided by the coal masters and owners of trucks it will not "pinch" either party very much. The wear and tear on this branch is enormous, the gradients being very great down the entire line. The severe weather has greatly interfered with business, both railway, shipping, and labour, some of the roads being impassable.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MARCH 21.—The Iron Trade in both districts of this county continues languid, and expectations of any speedy decided improvement are not sanguine. The spurt which the anticipation of an advanced Tariff gave to the exports to the United States has been followed by a reaction, which may last for some time, even should no change be made in the Tariff there. The general mistrust, which seems to last so long, and to defy the effect of cheap money, keeps down enterprise, and the special doubt which has been cast upon railway debentures has a very untoward effect in checking purchases for existing lines, and hindering new undertakings from being commenced. In the Hardware Trades general dullness is the rule. At present short time has not been extensively resorted to, but manufacturers are in many cases accumulating stocks, which they cannot long continue to do; so that, should trade not revive, the workmen will very shortly generally feel the effect in diminished wages.

THE GOVERNMENT BILLS FOR THE REGULATION OF LABOUR have been a good deal discussed in South Staffordshire and Birmingham this week. On one point there appears a universal agreement—that the larger and smaller manufacturers should not be dealt with in a different manner, a view which has been previously taken in this letter. A meeting of manufacturers was held on this subject, in Birmingham, on Tuesday. The attendance was small, and the opinions of the few present by no means unanimous; but the majority favoured the view that the provisions of the Workshops Regulation Bill should be applied to all trades. This would give great latitude as to the hours of work, would avoid any obligation on the employer to see that children went to school in one part of the day, and would, in fact, simply restrict children to work 8½ hours a day, and young persons and women to 12 hours, with 1½ hour out of that for meals. They favoured a general provision, making a certain degree of restriction necessary in order that children should be employed, but their resolution would result in a measure that would probably prove a mere dead letter. At the Wolverhampton meeting of a committee representing the iron and hardware trades, as well as promoters of education, over which the Earl of Lichfield presided, a unanimous opposition was expressed to adopting different modes of dealing with large and small manufacturers or workshops, and the leaving to local authorities the carrying out of the provisions. A resolution was adopted in favour of the application of the provisions of the Factory Acts Extension Bill, with some modifications to suit the special circumstances of the district, to all classes of manufacturers. A committee was appointed to consider the whole subject in detail. On Monday morning a meeting of workmen engaged in the iron trade was held at Brerley Hill, to consider the proposals of the Government. Ironworkers will, by the Bill, be brought entirely under the operation of the Factories Acts, except that persons of 13 years and upwards may work at night. The opinion of the meeting was unanimously in favour of the adoption of the provisions of the Factories Acts. A speaker said that in their trade there were many children sent to work when they should be under the direction of their mothers and the schoolmaster. The earnings they carried home for working 12 hours a day were miserably small, sometimes not more than 6d., and were of no use whatever to the parents who had bound them to the slavery. (Hear, hear.) As a rule, the earnings of the little one were spent in drink by the parents, who thus had two chances of being idle. He (the Chairman) believed that if the children were kept at school until a proper age the future generation of ironworkers would be stronger in health, handsomer in form—(hear, hear, and laughter)—and generally more intelligent. The mind of a child was like a garden—uncultivated, full of weeds; cultivated, a pleasant spot to all around, as well as to the proprietor. (Hear, hear.) Mr. Hobson, the secretary of the Ironworkers' Association, said he had received many communications from working men, who complained loudly of the manner in which their children were worked. The little ones, after a night's work, had scarcely strength to walk home, and frequently fell asleep before they could take refreshment. These men who had complained were under the impression now that the introduction of the Factories Act to ironworkers would be a blessing. A resolution approving of the Government Bill was passed with acclamation. An objection is made by some of the ironmasters against the provision for children and young persons to leave off work at 2 o'clock on Saturdays, for which, they say, there is no necessity, as the men seldom work on Monday. The question is whether, if the works closed sooner on Saturday, work might not be commenced earlier in the following week; if so, it would certainly be an advantage for the worker to cease on Saturday, so as to give an opportunity for men to go to market, and many might use the time to gain relaxation in the country, or in other ways than at the public-house.

A somewhat puzzling communication appeared in the *Miner's Journal* of March 9, in which some rather strange allusions are made to a simple expedient for avoiding the danger of persons falling from skips in descending or ascending the shafts of coal mines. The writer even went so far as to ridicule the engineer by whom these "safety-chains" had been recommended; yet as to the wisdom of the advice that persons descending in skips should secure themselves from falling by this simple, easy, and inexpensive precaution facts abundantly testify. In the course of the last six or seven years nearly 50 persons have lost their lives in this district by falling from skips all of whom would have been saved by this precaution. Last year two mine agents and a workman were descending, and for the first time used the safety-chain. Singular to state, they owed to it their preservation from a fall of 150 yards. Some time ago, several persons in descending a pit found it full of carbonic acid gas, which destroyed their power of preserving their position in the skip, but the safety-chain prevented what must have been death to all. It is easy to understand to how many dangers persons are exposed who descend and ascend shafts in open skips from their striking the side or suddenly twisting, from carbonic acid gas, or even from momentary forgetfulness, or a sudden attack of giddiness.

On Saturday Samuel Dale, 52 years of age, employed at the Wood Pit, Apedale, North Staffordshire, was assisting in removing the props in a pit, when a quantity of bass fell upon him. He was got from under in a few minutes, and taken up the shaft, but died in about a quarter of an hour afterwards. At an inquest held before Mr. Booth, coroner, and which was also attended by Mr. Wynne, Government Inspector, it was stated by a witness that the cause of the fall was the removal of the 10 or 12 props. The deceased had not been at work more than five minutes. The jury returned a verdict of "Accidental Death."

A death from great carelessness was the subject of an investigation before Mr. W. Morgan, coroner, at Cannock, on Tuesday, the deceased being John Foster, a miner, 45 years of age. On the morning of Thursday, the 28th ult., he was at work at the Hednesford Colliery, and was being drawn up the shaft in the cage with fourteen pieces of timber, which he had neglected to fasten with the lashing chain; when he was about 15 yards from the bottom some of the rails slipped, and caught against the side of the shaft. He called out to a man at the bottom to signal for the engine to be stopped, and this was done, the cage being brought to a stand-still after it had gone 2 or 3 yards more. Some of the timber fell to the bottom, the band broke, and the cage, with the deceased and the rails, dropped to the bottom, the deceased falling underneath, and receiving injuries which caused immediate death. The jury returned a verdict of "Accidental Death," and made an addendum to the verdict to the effect that there were of opinion that it was expedient, for the greater safety of the men, that rule be inserted in the colliery rules that men be not allowed to ascend or descend with timber rails or any implements that required lashing.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

MARCH 21.—There is very little alteration to be noted in the state of the Iron Trade in Derbyshire, the long period of comparative inactivity having given way to a rather better state of things. So far business is far from being good, although such firms as the Staveley Company, with their vast foundry, are kept well going, whilst other establishments the reverse is the fact. At the collieries, however, the state of affairs is much better, so that, aided by a season of more than ordinary severity, the demand for house coal has more than realised the expectations of our colliery proprietors. The quantity of coal sent from Clay Cross alone is something enormous, so that with the new pits now opening out the prospects of the Derbyshire coal field are just now more promising than, perhaps, at any other district in the kingdom. At Sheepbridge there is no change to relate since the last report, with the exception of a current, and apparently well-authenticated, report that the company are about to take to the Cobnar Wood Colliery, which for nearly two years has been standing still. The colliery was started by a limited company, and after expending some 50,000, they sunk one shaft to the coal and a second one more than half-way, when the water stopped further progress. One of the metropolitan financial companies having made considerable advances for the purpose of winning the coal, the place at last came into their hands as first mortgagees, and after some six months since offered it for public sale at the reserve price of 11,000. No offer having been made, some of the largest shareholders made an effort to get it into their hands, for which purpose they employed Mr. Pense, a well-known mining engineer, to report as to what would be the cost of clearing the pit and getting down to the coal from the second shaft. That gentleman inspected the

workings, and offered to clear the pit and put it in an efficient state for getting the coal for the sum of 10,000. That offer did not come to anything, so that the Sheepbridge Company, who are the lessors of the coal, appear to have determined to take the place into their own hands. At the Devonshire Silkstone Colliery nearly the whole of the top and bottom work has been completed, and drawing to a considerable extent has been commenced. The company have also some 20 coke ovens in full operation, whilst a much larger number are in course of construction. The colliery, so far, has been a great success, and unlike most of the large concerns in the same district, the shares are at a high premium.

Business generally is looking better in Sheffield; and, although many of the branches of the iron and steel trade are far from being busy, yet the heavier departments, including the makers of locomotives and other machinery, steel axles, cranks, and plain Bessemer, are well supplied with orders. There is a very strong demand for files, but the trade seems to be somewhat unsettled, as are also some of the lighter branches, such as spring knives, tools, &c. The South Yorkshire district, extending from Sheffield to within a few miles of Leeds, the trade has undergone little or no alteration, some of the largest firms being well supplied with orders for nearly all qualities of iron, whilst others are doing but a moderate business. For bars, rods, and sheets there is a moderate enquiry, but the large orders for rails since anticipated have not yet made their appearance. So far as regards the question of rails, there can be no doubt that the trade of steel is fast superseding the iron ones, and that the latter are likely to be entirely extinguished. At the vast works of the Messrs. Cammell and Co. (Limited), at Penistone, there is a very large output, not only of rails, but also of plain Bessemer steel, as well as cranks, axles, and general machinery. Why the shares of a company doing so large a business, and one generally considered to be in every way profitable, should be quoted at 12½ is inexplicable. Thanks to the severe character of the weather of the last 14 days, there has been a very good demand for nearly all qualities of house coal, so that in the London and southern markets there has been a much larger quantity of the Silkstone and Barnsley seams than is usual at this season of the year. On the other hand, owing to the stoppage of several of the cotton mills in various parts of Lancashire, the colliery owners on the Manchester, Sheffield, and Lincolnshire line of railway complain of the shortness of orders. A full average trade, however, is being done to Hull and Goole, from which the places the coal is forwarded by water to the ports on the south-east coast. The furnaces on the slack of the Tyne are kept fully going, and the Frodingham Company expect to put an extra furnace in blast to-morrow. The enquiry for coke continues good, and notwithstanding the quiet state of the iron trade, all that is made is unequal to the requirements of the furnaces and steel works, who are the principal consumers.

[ADVERTISEMENT.]

From Mr. EDWARD COOKE:—It is pleasing for me to have to record an active market, especially for shares in tin mines. Another rise in the price of tin has given a further stimulus to the demand for shares in mines producing this mineral. It is not at all improbable that the price of tin will yet advance considerably; I, therefore, advise an immediate purchase of shares in such mines as have not yet responded to the rise in the price of tin above-mentioned. Among them will be found Wheal Bassett, East Lovell, North Croft, Wheal Buller, Prosper United, and Trumpet Consols. These mines are all certain, I think, to advance in price very much. GREAT WHEAL VOR continues to maintain its position as the most productive and profitable tin mine in Cornwall. It is a positive fact that the prospects at the present time are far more encouraging than they have been for a long time previous. At the quarterly general meeting of shareholders, held on Wednesday last, the accounts and reports of the directors and agents were of the most satisfactory character. A dividend of 7s. 6d. per share was declared. Judging, however, from the improved prospects in several parts of the mine, it is highly probable that the amount of dividend will increase for the future. The shareholders may congratulate themselves upon possessing a splendid property, which, under the superintendence of their highly-respected and most efficient managing director, will give them good dividends for many years to come. TRUMPET CONSOLS is so little known to the general public that I again draw attention to it. It is a property in which money may be invested with, I may say, an absolute certainty of returning 15 to 20 per cent. per annum on the present price of the shares. I would suggest, however, to those who have money to invest, and desirous of doing so prudently, that they obtain an independent opinion of the merits of Trumpet Consols and East Lovell. For about two or three guineas the report of thoroughly practical agents, totally unconnected with these mines, may be obtained. For my own part, I am perfectly satisfied with the manager's usual report, believing him to be one of the most reliable authorities upon mining in Cornwall. GREAT NORTH LAXEY shares have improved about 10s. each since the meeting on the 16th inst., consequent upon the entire refutation of unfounded statements brought against its management, for reasons not known to the prime actors in the late movement. GREAT LAXEY continues to give large profits, and is likely to do so for many years to come. Attempts have been made to create a panic among the shareholders in this mine also, by insinuations against its management. It appears to me that the very fact of the Chairman of the company holding such a large interest in the mines is a guarantee, if any were required, that they are well managed. The shareholders who attend the meetings do not require to be told by me that in their Chairman they possess a gentleman who stands in a high position in the Isle of Man, and who appears perfectly conversant with the routine of mining operations, and is certainly one of the best amateur miners I ever met with. The shareholders need not, in my opinion, be at all apprehensive about their interests in the Great Laxey Mines. NORTH WHEAL CHIVERTON has been inspected and reported upon by several well-known mining agents, including those of West Chiverton, Wheal Trelawny, North Croft, &c. They all bear testimony to the splendid prospects this mine holds out of becoming highly productive of lead. The operations ought never to have been suspended, but more vigorously prosecuted. I have, however, very unfortunately found that such a course was adopted just upon the point of almost certain success, and I feel confident that at no distant period a great and profitable lead mine will be laid open, and, like its rich neighbour, West Chiverton, prove a source of great wealth to its shareholders. No doubt the shares will be applied for far in excess of the number to be allotted; but, as they are to be allotted fairly to the earliest applicants, an early application should be made. I would here mention that Chiverton shares were apportioned at 4s., and went steadily up to 14s.; Chiverton Moor shares were apportioned at 3s., and went steadily up to 7s. 10s., &c.; West Chiverton were offered at 15s. to 20s. each at the present company commenced operations, and they steadily went up to 80s., and now stand firm at 60s. to 62s. North Chiverton is in the same number of shares as these three mines, and certainly contains equal chances of success. The lodes are large, and there are several of them in the sett. Already both lead and blende in paying quantities are stated to be discovered; and, besides the reports of the various agents upon the merits of the mine, there is the testimony of the manager of Great Laxey, who has known the property for many years, and who states it as his opinion that with a comparatively small outlay one of the best mines in the district will be opened up. With such testimonials as these, and with the knowledge I have of the district, and of this mine in particular, I look forward with great confidence to seeing North Wheal Chiverton turning out one of those mining prizes that recoup the adventurer in this class of property very handsomely for any losses he may incur in other adventures. CALDECK FIELDS in good demand, at an improved price.

From Messrs. WARD and JACKMAN:—Unfortunately the very name of gold has an enchanting sound, hence the extraordinary infatuation of some people who shun our British copper, tin, and lead mines as undertakings entirely without merit, yet freely embark their capital in these visionary speculations. In the Journal of Dec. 22 we stated that a requisition had been signed by a number of large shareholders in the MINERAL RIGHTS ASSOCIATION, requesting the directors to convene a meeting, and the purpose of considering the advisability of winding-up the concern. By some means this fell to the ground, although the advantages the shareholders would receive are apparent, when we state that the shares are being hawked about at 5s., although the company have at least 15s. per share in hand. We do trust that some one will take the initiative in this matter before the whole of the money is exhausted in sending out inspectors to outlandish countries to try and find an impossibility—to use the agent's own words—if it is the shareholders who will take the initiative in this matter, they are greatly mistaken. We have before asked the question, and we do so again, "Are there no mineral districts in Old England where 30,000 could be expended to the advantage of the shareholders?" We believe amongst all the copper-producing countries in the world Great Britain holds the first rank; and Cornwall, and Devonshire adjoining, is the centre of its production; and if the directors of the Mineral Rights Association are desirous of promoting the interests of the company, in harmony with the general body of the shareholders, as they say they are, they must look to the general body of the shareholders, as they say they are, that "gold may be bought too dear."

We subjoin a few extracts from advices received this week from our correspondents.—EAST RUSSELL: They are driving to cut the south lode at the 140 east of the slide, and good ore is washing out from between the timber, so that which will cut a north lode in a few days; this, at the 130, is 10 ft. wide, a mass of gossan, with some grey and white ore. In the cross-cut at the 140 a branch of the south lode is bearing off north, and will intersect the north lode, and as it contains good ore the chances are that this large gossan lode, fed by the large grey branch of the south lode, will be found productive, when the shares may be expected to rise considerably. At GREAT FORTUNE there is an improvement in the bottom of Hoskin's flat-rod shaft, on Carmel lode, which, it is hoped, may turn out something good; it is at present valued at 20s. per fathom. At NORTH TREKERRY the lode at the 120, east of Tresidder's shaft, is looking better, and other places are looking more and more promising, with every appearance of further improvement. They sampled 37 tons of copper ore on Wednesday. At WHEAL BULLER, the flat-rod went to work on Tuesday last, and the different points are valued this week at 117s. per fm. WEST SETON is looking well; lode in Hilderley's shaft is worth 100s. per fm.; 120 west, 70s. per fm.; lode in winze 120, worth 5 tons—this winze, it must be remembered, is a few fathoms before the 120, so there is a fair chance of an improvement in that level shortly; 522 tons of ore were sampled yesterday. WHEAL SETON sampled 783 tons. At NANIGLES, they have a good in the 120; this mine should not be lost sight of.

From Mr. EDWARD BREWIS:—The Mining Market during the past fortnight has been gradually strengthening in tone, and a good business has been done in legitimate properties. PRICE OF WALES shares have remained pretty steady, 45s. to 50s., during the past week, with, however, less business, the price being a peculiar one, excepting to those who bought much lower. CHIVERTON MOORS advanced to 8½, 8½, on Tuesday, but have since receded, speculators taking their profits; they close 7½ to 7¾. This mine must always command attention from its proximity to West Chiverton, the success of 1863, and which I had the satisfaction of bringing to a large extent before my friends in the North in 1864. SOUTH CONDBURROWS have risen to 16s. 3d., 18s. 9d., equivalent to a rise of 20 per cent. during the past ten days. The improvement there below the 40 continues to get better, now worth from 25s. to 30s. per fm. for copper. I drew attention to this mine when it was at half the present price, some three months ago, and the investing public should observe the market fluctuations in this property. EAST WHEAL SETON shares have been largely dealt in, and since my letter in the Journal of Jan. 26, drawing attention to this low-priced share,

they have advanced 50 per cent., and I have dealt in one-fourth of the mine. Its position is undeniable, and in a few months the engine just purchased is at work, shares will then take a great rise—therefore, I advise, EAST BOTTLE HILL is another property overlooked. Investors should lose no time in buying shares here, whilst they may be had so low. Good profits will be made shortly. Price, ½ to ¾.

*** A pressure on our space compels us to omit Mr. J. B. Reynolds's Remarks.

Contract for South Wales Coals for Bermuda.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.



THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that, on TUESDAY, the 29th April next, at Two o'clock, they will be READY TO TREAT with such persons as may be willing to CONTRACT for SUPPLYING and DELIVERING into store at Her Majesty's Naval Yard at Bermuda FIVE THOUSAND TONS of SOUTH WALES COALS, fit for the service of Her Majesty's steamships and vessels.

A form of the tender and conditions of contract may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House. No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals for Bermuda," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY,

Registrar of Contracts and Public Securities,
Contract Department, Admiralty, Somerset House, 21st March, 1867.

TO COAL OWNERS AND OTHERS.

THE LONDON PATENT COAL COMPANY are now GRANTING LICENSES for the USE of their PATENT for the UTILIZATION of COAL DUST. All communications to be addressed to the Managing Director, 26, Martin's-lane, Cannon-street, E.C.

THE LONDON STEAM COALIER AND COAL COMPANY

(LIMITED).

Capital £300,000, in 30,000 shares of £10 each.

First issue 15,000 shares.

Owners of the Thornley and Ludworth Collieries, in the county of Durham, extending over an area of nearly 4000 acres, and containing upwards of 43,000,000 tons of best coals.

REPORT OF PROCEEDINGS at the SECOND GENERAL MEETING of the company, held at the company's offices, St. Michael's House, Cornhill, London, E.C., on Monday, the 4th day of March, 1867.

G. WALTON, Esq., in the chair.
By the directors' report, which was taken as read, it appeared that the net profit for the past year from the three departments of the company's business, viz., the colliery, the wharf, and the steamers—amounted to a total of £16,605 6s. 7d., out of which sum the directors proposed to pay a dividend, making, with the interim dividend paid in July last, a total dividend for the year of 10 per cent. free of income tax; £2000 had been placed to reserve fund, and a sum of £1777 11s. 5d. would remain to be carried forward to profit and loss new account. The report also stated that the colliery had yielded upwards of 220,000 tons of coal during the time it had been in the hands of the company (rather less than twelve months), and that when the new shaft is sunk, which the directors propose to do without delay, the yield will be probably more than doubled, while the cost of working will be proportionately reduced; there can be no doubt, under these circumstances, that the directors will be enabled to declare even much higher dividends when the shaft is completed.

The directors' report having been unanimously adopted, a dividend was declared, making, with the interim dividend paid in July last, a total dividend of 10 per cent. free of income tax, for the year 1866.

At the recommendation of the board, the directors' qualification was raised from 50 to 800 shares of £10 each.

The directors and auditors having been elected for the ensuing year, a vote of thanks to the Chairman terminated the proceedings.

By order, T. R. EAMES, Secretary.

St. Michael's House, Cornhill, London, E.C., 14th March, 1867.

Applications for the 2500 shares remaining for allotment out of the first issue to be made to the secretary, at the company's offices, where every information can be obtained.

THE DON PEDRO NORTH DEL REY GOLD MINING

COMPANY (LIMITED).

At the FIFTH ORDINARY GENERAL MEETING of the company, held at the London Tavern, Bishopsgate-street, on Wednesday, the 20th March, 1867,

HENRY HAYMEN, Esq., in the chair.

It was proposed by the CHAIRMAN, seconded by WILLIAM ESPIVENT DE LA VILLESBOISNET, Esq., and carried unanimously:—

That the report and statement of accounts presented at this meeting be received and adopted.

It was proposed by the CHAIRMAN, seconded by ROBERT HESKETH, Esq., and carried unanimously:—

That a dividend of 2s. per share (being upwards of 14 per cent. per annum), free of income tax, be and is hereby declared for the year ending 31st Dec., 1866.

It was proposed by WILLIAM ESPIVENT DE LA VILLESBOISNET, Esq., seconded by JAMES DOWLING, Esq., and carried unanimously:—

That the retiring directors, Messrs. S. Lloyd Foster and Henry Haymen, be and are hereby re-elected directors of the company.

It was proposed by WILLIAM ESPIVENT DE LA VILLESBOISNET, Esq., seconded by SAMUEL FIELD, Esq., and carried unanimously:—

That Messrs. Quilter, Ball, and Co. be and are hereby re-elected the auditors to the company for the ensuing year, and that the thanks of the meeting be tendered to them for their efficient services.

It was proposed by the CHAIRMAN, seconded by ROBERT HESKETH, Esq., and carried unanimously:—

That the sum of 30 guineas be paid to Messrs. Quilter, Ball, and Co. for their services in auditing the accounts of the company for the past year.

It was proposed by the CHAIRMAN, seconded by JOHN CROPP, Esq., and carried unanimously:—

That the best thanks of the shareholders are due, and are hereby tendered, to Capt. T. Treloar and staff for their zealous services in promoting the interests of the company.

It was proposed by SAMUEL FIELD, Esq., seconded by CHARLES CHAMBERS, Esq., and carried unanimously:—

That this meeting wishes to record a vote of thanks to the secretary, as well for his courtesy on all occasions as for the clear business-like manner in which the accounts are kept.

It was proposed by CHARLES CHAMBERS, Esq., seconded by JOSIAH FIELD, Esq., and carried unanimously:—

That the thanks of the shareholders are due, and are hereby tendered, to the Chairman and Directors of the company for their judicious and successful management of the affairs of the company.

HENRY HAYMEN, Chairman.

JOHN E. DAWSON, Sec.

9, Sise-lane, Bucklersbury, March 20, 1867.

THE PESTARENA GOLD MINING COMPANY

(LIMITED).—AN EXTRAORDINARY GENERAL MEETING of the shareholders of the Pestarena Gold Mining Company (Limited) will be held at the Guildhall Tavern, 33, Gresham-street, in the City of London, on SATURDAY, the 30th day of March, 1867, at One o'clock in the afternoon, for the purpose of confirming and making special the resolution passed at an extraordinary general meeting of the shareholders of the said Val Toppa Gold Mining Company (Limited), held at the Guildhall Tavern aforesaid, on the 13th day of March, for winding-up the said Pestarena Gold Mining Company (Limited) voluntarily, and authorising an amalgamation of the said Pestarena Gold Mining Company (Limited), and the Val Toppa Gold Mining Company (Limited), and the construction of a new company, and for such purposes as are set forth in such resolution.

By order of the Directors, J. C. GOODMAN, Sec.

Offices, 9A, Great St. Helen's, London, E.C., March 20, 1867.

THE VAL TOPPA GOLD MINING COMPANY

(LIMITED).—AN EXTRAORDINARY GENERAL MEETING of the shareholders of the Val Toppa Gold Mining Company (Limited) will be held at the Guildhall Tavern, 33, Gresham-street, in the City of London, on SATURDAY, the 30th day of March, 1867, at Two o'clock in the afternoon, for the purpose of confirming and making special the resolution passed at an extraordinary general meeting of the shareholders of the said Val Toppa Gold Mining Company (Limited), held at the Guildhall Tavern aforesaid, on the 13th day of March, for winding-up the said Val Toppa Gold Mining Company (Limited) voluntarily, and authorising an amalgamation of the said Val Toppa Gold Mining Company (Limited), and the Pestarena Gold Mining Company (Limited), and the construction of a new company, and for such purposes as are set forth in such resolution.

By order of the Directors, J. C. GOODMAN, Sec.

Offices, 9A, Great St. Helen's, London, E.C., March 20, 1867.

THE VALLANZASCA GOLD MINING COMPANY

(LIMITED).—AN EXTRAORDINARY GENERAL MEETING of the shareholders of the Vallanzasca Gold Mining Company (Limited), will be held at the Guildhall Tavern, No. 33, Gresham-street, in the City of London, on SATURDAY, the 30th day of March, 1867, at half-past Two of the clock in the afternoon, for the purpose of confirming and making special the resolution passed at an extraordinary general meeting of the shareholders of the said Vallanzasca Gold Mining Company (Limited), held at the Guildhall Tavern aforesaid, on the 13th day of March, for winding-up the said Vallanzasca Gold Mining Company (Limited) voluntarily, and authorising an amalgamation of the said Vallanzasca Gold Mining Company (Limited), and the Val Toppa Gold Mining Company (Limited), and the Pestarena Gold Mining Company (Limited), and the construction of a new company, and for such purposes as are set forth in such resolution.

By order of the Directors, J. C. GOODMAN, Sec.

Offices, 9A, Great St. Helen's, London, E.C., March 20, 1867.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK

BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of 1864 forwarded post-free on application.

ROBERT LIBBY AND SON,

MINE AND SHAREDEALERS,
CAMBORNE, CORNWALL.

Museum of Practical Geology, Jermyn-street.

MUSEUM OF PRACTICAL GEOLOGY, JERMYN STREET.
—NOTICE.—This MUSEUM is now OPEN from Ten A.M. to Ten P.M. on MONDAYS and SATURDAYS. Admission free. By order.

NICHOLLS, MATHEWS, AND CO., ENGINEERS,

BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS OF STEAM ENGINES OF EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION.

NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, MATHEWS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

SANDYS, VIVIAN, AND CO.,

COPPER HOUSE FOUNDRY, HAYLE, CORNWALL,

ENGINEERS, IRON AND BRASS FOUNDERS,

MANUFACTURERS OF PUMPING ENGINES for WATER-WORKS, MINING MACHINERY, MATERIALS, and TOOLS of every description.

Foreign mines supplied on the best terms, and at the shortest notice. Second-hand Mining Machinery and Pitwork in Stock; also a new 4 and a 2-horse power high-pressure vertical engines, with boilers, and a second-hand 19-inch whelm engine, condensing.

WILLIAMS'S PERRAN FOUNDRY COMPANY,

PERRANARWORTHAL, CORNWALL.

MANUFACTURERS OF STEAM PUMPING and EVERY OTHER KIND of ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.

London Agent.—Mr. EDWARD COOKE, 76, Old Broad-street, London, E.C.

RAILWAY CARRIAGE COMPANY (LIMITED)

ESTABLISHED 1847.

OLDBURY WORKS, NEAR BIRMINGHAM.

MANUFACTURERS OF RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION OF IRONWORK.

Passenger carriages and wagons built, either for cash or for payment over a period of years.

RAILWAY WAGONS FOR HIRE.

CHIEF OFFICES.—OLDBURY WORKS, NEAR BIRMINGHAM.

LONDON OFFICES.—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE BEVERLEY IRON AND WAGON COMPANY

(LIMITED).

MANUFACTURERS OF RAILWAY CARRIAGES and WAGONS, WROUGHT and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED IRON, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS OF PORTABLE FARM RAILWAYS, TURN-TABLES, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINERY, MANUFACTURERS OF FIELD, ROAD, and BAIN IMPLEMENTS, PATENT LORRY, CART, and CARRIAGE WHEELS, with WOOD or IRON NAVES. REAPING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for home and foreign RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c.

IRONWORKS BEVERLEY, YORKSHIRE.

JAMES DEWHIRST, Sec.

THE BIRMINGHAM WAGON COMPANY (LIMITED)

MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

EDMUND FOWLER, Sec.

WAGON WORKS.—SMETHWICK, BIRMINGHAM.

Loans received on Debenture; particulars on application.

London Agent.—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S.W.

STAFFORDSHIRE WHEEL AND AXLE COMPANY

(LIMITED).

MANUFACTURERS OF RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK, used in the CONSTRUCTION OF RAILWAY ROLLING STOCK.

OFFICES AND WORKS, HEATH STREET SOUTH, SPRING HILL, BIRMINGHAM.

BOWLING IRON COMPANY,

BRADFORD, YORKSHIRE.

BEST CRUCIBLE CAST-STEEL TYRES, AXLES, CRANK AXLES, BOILER PLATES,

Also COG WHEELS, and other CASTINGS.

This company is prepared to furnish the above-mentioned articles in CAST STEEL of a very superior quality, made principally from their own well-known "BOWLING IRON."

Also BOWLING WROUGHT-IRON SOLID WELDLESS TYRES, of any size and to any section.

THE SEACOMBE FORGE RIVET AND BOLT COMPANY,

MANUFACTURERS OF

BOLTS, RIVETS, WASHERS, COACH SCREWS, SPIKES, SET PINS, TIE RODS, COTTER PINS, &c.;

Also,

ENGINEERS' AND SHIPBUILDERS' FORGINGS, SMITHS' WORK, and every description of SHIPS' FASTENINGS.

WORKS.—SEACOMBE, NEAR BIRKENHEAD.

A GOOD ROLLING MILL TRAIN ON SALE

AT THE SEACOMBE FORGE RIVET AND BOLT WORKS, Near Birkenhead.

STEEL! STEEL!! STEEL!!!

JOHN TURNER, SHEFFIELD, AND STOCKTON-ON-TEES, MANUFACTURER OF SUPERIOR REFINED CAST STEEL FOR MINERS' DRILLS.

CUP and TURNING TOOLS, price and quality not surpassed. Try one bar, delivered free at manufacturers' prices.

J. TURNER keeps in stock all kinds of tools suitable for engineers, mining purposes, and shipbuilders, at the Stockton depot, where all communications are requested to be sent.

GALIBERT'S PATENT RESPIRATOR,

For PRESERVING LIFE at FIRES, in DANGEROUS MINES, or in NOXIOUS VAPOURS. Full particulars by post.

PATENT INVENTION COMPANY.

No. 45, LITTLE BRITAIN, LONDON, E.C.

COAL CUTTING MACHINERY.—

THE WEST ARDSLEY COMPANY, having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have been most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONNISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—THE WEST ARDSLEY COMPANY, having reason

THE MOLLAND MINE AND PLANT, TO BE SOLD BY TENDER.—The mine is situated about eight miles from South Molton, and twenty miles from Barnstaple. The PLANT consists of a STEAM-ENGINE and BOILER, pitwork, water-wheel, and crusher, and everything necessary for carrying on the mine. The mine embraces three copper lodes. The one on which operations have been conducted is a strong, large, masterly, and promising lode, from which hundreds of tons of ore have been raised. The mine is down 88 fms. at the lowest point from surface. At the bottom level the lode is large and regular, presenting a promising appearance, and has produced many tons of rich grey ore. It only requires a small additional capital to sink the mine to the depth at which the Bampfylde Mine became rich. The Bampfylde Mine is in the same district, and worked on parallel lodes to the north-west. The composition of the lodes in both mines is similar. The latter mine is worked by a Liverpool company, and is about 120 fms. deep from surface. The sales during the year 1866 were 418 tons, at an average price of £12 per ton. It is now a regular dividend-paying mine.

Further particulars may be obtained from Capt. BENNETTS, South Molton, by whose permission the mine may be inspected, and to whom tenders must be addressed on or before Saturday, 13th April next.—March 18, 1867.

WHEAL CURTIS, CROWAN, CORNWALL.

TO BE SOLD, BY PRIVATE CONTRACT, THE SETTS OF WHEAL CURTIS, situate in the parish of Crowan, together with the MATERIALS thereon, consisting of—
A 70 in. cylinder PUMPING ENGINE, with TWO BOILERS.
26 in. STEAM WINDING ENGINE, and ONE BOILER, with steam capstan attached.

Several fathoms of 10, 11, and 16 in. pumps, and a quantity of other pitwork, chains, pulleys, &c.
For viewing the same, apply to Capt. HENRY SKEWIS, on the mine.
Further particulars may be had on application to Messrs. B. MATTHEWS and SON, Camborne, Cornwall, by whom tenders will be received on or before the 25th day of March, 1867.
The committee do not bind themselves to accept the highest tender.
Camborne, March 13, 1867.

A FREEHOLD ESTATE, near WHITBY, YORKSHIRE, of ONE HUNDRED AND SIXTY ACRES. Annual value, exclusive of minerals, about £200.
The estate contains the Cleveland seams of Ironstone, which have been proved, and which are capable of being worked at an unusually cheap rate; it is also the centre through which many hundreds of acres of surrounding ores are only practically accessible. A railway runs through the property, and a branch direct to the coal fields has lately been opened, which, on the first revival of trade, must have the effect of greatly enhancing the value of this estate.
The above offers a most favourable opportunity for private or joint-stock enterprise in the manufacture of pig-iron, which, there is no doubt, can be produced under 40s. per ton.
For particulars, apply to Messrs. BELL and BRODRICK, 9, Bow Church-yard, Cheapside, London; or Messrs. GRAY and GANNETT, Solicitors, Whitby.

BLACK CRAIG CONSOLIDATED MINING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, limiting the liability of shareholders to the amount of their shares.
Capital £20,000, in 20,000 shares of £1 each, fully paid up, and 1000 shares, marked B, of £5 each.

£1 to be paid on application, £1 on allotment, £1 in four months, £1 in eight months, and £1 in twelve months after allotment, leaving shareholders without further liability. The holders of A shares to be paid 10 per cent. out of profits before the holders of A shares are to receive any dividend; the holders of B shares may be paid off by the holders of A shares at the rate of £10 for each £5 share, by giving the holders of B shares six months notice of their intention to do so.

DIRECTORS.
R. R. MICHELL, Esq., Marazion, Cornwall.
JAMES WESTON, Esq., Sheffield.
THOMAS FIELD, Esq., Crown-chambers, Threadneedle-street.
Two other directors to be appointed at the first meeting of shareholders.
BANKERS—London and County Bank, Lombard-street.
SECRETARY—Mr. P. SCRIVENER, Esq., 40, Norfolk-street, Strand.
AUDITOR—Daniel Betts, Esq., Cook's-court, Lincoln's Inn.
CONSULTING AGENT—Capt. Arthur Waters.
AGENT AT THE MINE—Capt. John Smitham.

OFFICES, 40, NORFOLK STREET, STRAND, LONDON, W.C.

PROSPECTUS.

This company has been formed for the purpose of extending the workings under a course of ore discovered in the 43 fm. level, and for developing the West Black Craig Mine, by the issue of 1000 B shares, and it is believed that the whole of the £5000 additional capital will not be required to be expended, before the mine will be making considerable profits. The sett is very extensive, and is held for a term of 31 years, from the 23rd May, 1857, at 1-16th royalty, and is traversed by several lodes, three of which only have been worked on, and have produced enormous quantities of lead, copper, and blende ores. The mines are situated within a mile of the port and railway station of Palnure, from whence supplies of coals and materials are obtained, and the ores forwarded to the smelting-works. From the size, nature, and character of the lodes, and their great productiveness at such a shallow depth, and the economy with which they can be worked (coals, for instance, being 8s. 6d. per ton delivered), it may fairly be said to offer advantages for the outlay of so comparatively small a capital that are seldom met with. The report of Captain Arthur Waters, Captain John Smitham, the late Capt. Stephen Edly, Mr. George Henwood, and other practical mining agents, fully justify the belief that large quantities of ore will be produced by sinking deeper.
Prospectuses, plans of the mines, and forms of application for shares, may be had at the offices of the company.

BLACK CRAIG CONSOLIDATED MINING COMPANY (LIMITED).—Notice is hereby given, that the LAST DAY for the APPLICATION for the SHARES in the above company is fixed for MONDAY, the 25th inst.
T. P. SCRIVENER, Secretary.
40, Norfolk-street, Strand, March 14, 1867.

THE NEW NANTYMWYN MINING EXTENSION COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, whereby the liability of each shareholder is limited to the amount of his shares.
Capital £50,000, in 50,000 shares of £1 each; 5s. deposit on application, and 5s. per share on allotment.

No call will be made for six months, and it is probable from the prospects, with the assistance of the ore money, that no further capital will be required.

DIRECTORS.
Capt. WM. A. RUMBELOW PEARSE, B.N.S., St. Peter's-square, Hammersmith, and Senior United Service Club, Pall Mall.
Major R. E. F. CRAWFORD, late Royal Artillery, 27, Oakley-square, Brompton, London.

FRANCIS WILLIAM STONE, Esq., late H.E.I.C.S., 15, Royal Avenue-terrace, Chelsea, and 6, Prospect-place, Hastings.

HENRY O'MALLEY, Esq., Barrister, 23, Sidney-street, Brompton, and Kilboyn House, Mayo, Ireland.

CHRISTOPHER RIGBY A'HUTY, Esq., 137, Cambridge-street, South Belgrave, London.

HENRY CLINTON COOPER, Esq., 78, Gloucester-street, South Belgrave, London.

FRANCIS JOSEPH SLOCOMBE LESTER, Esq., Wellington-road, Gravesend, Kent, and Goodwood-road, New Southsea, Hants.

(With power to add).

BANKERS—The North and South Wales Bank, Welshpool; and Messrs. Jones and Co.'s Bank, Llandoverly, South Wales.

AUDITOR—George Atkins, Esq., Sydney Villa, Richmond, Surrey.

BROKERS—Messrs. Barrett and Co., 20, Spring-gardens, Charing-cross, and 78, Lombard-street, London.

MANAGER AT THE MINE—Capt. R. Rowe, Mining Engineer.

SECRETARY—William Henry Harden, Esq.

REGISTERED OFFICES.
No. 5, BATAVIA BUILDINGS, HACKINS' HEY, LIVERPOOL.

ABRIDGED PROSPECTUS.

The object of the company is to acquire three valuable mining properties in Carmarthenshire—that is to say, New Nantymwyn, Gilfach, and Glan-Towy. New Nantymwyn is a continuation westward of the celebrated Nantymwyn Mines. These mines have been worked to immense profit for centuries, and appear to be perfectly inexhaustible. Some idea may be formed of the great value of these lodes from the fact that they occupy a channel of 180 ft. in width, consisting of six divisions of lodes, and that a sink on one of them is now yielding 18 tons of rich quality ore, worth upwards of £200 per fathom for lead.

2.—The Gilfach property consists of a lead mine, worked to some extent, and furnished with water machinery, in which a discovery of lead ore has been made by an adit. It is proposed by the company to extend the shaft downwards on this course of ore, as well as to explore another discovery of ore in the sett on the Lady Eliza No. 2 lode, where there is a good back of ore ground cropping up to, and extending a considerable length along, the surface.

3.—Glan-Towy is an old lead mine. Shafts, which have yielded lead ore in some quantity, exist on the top of the hill, and the present company propose to drive an adit to prove the value of the lode under the old sinks.

Plans taken from the Ordnance Survey, showing the exact position of the lodes, together with ground plans of the estate sections of the mines, and reports by skilful mining engineers, are appended, and will be forwarded on application to the secretary. Specimens of the ore may be seen at the company's offices.

Taking into consideration the position of the mines, the highly favourable prospects, and the return of ore being immediately available, the directors feel confident that, with the outlay proposed, profits equal to the adjoining mines will be participated in by the shareholders.

Applications for shares, to be accompanied with the deposit of 5s. per share, may be made to the secretary, at the offices of the company, or to the bankers.

FORM OF APPLICATION FOR SHARES.

To the Directors of the New Nantymwyn Mining Extension Company (Limited).
GENTLEMEN,—Having paid to your bankers the sum of £5, being a deposit of 5s. per share on the shares of the above company, I hereby request that you will allot me that number, and I agree to accept such shares, or any less number you may allot to me; and I agree to sign the Articles of Association of the company when required, and I authorise you to place my name on the register of shareholders for the shares allotted to me.

Usual signature.....
Name in full.....
Residence.....
Profession.....
Date.....

Notice is hereby given, that NO APPLICATION FOR SHARES can be RECEIVED after SATURDAY, March 30, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Devon.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the SWINCOMBE VALE MINING COMPANY (LIMITED).—By an order made by his Honour the Vice-Warden of the Stannaries in the above matter, dated the 19th day of March inst., on the petition of James Pearce, of Tavistock, within the said Stannaries, a creditor of the said company, it was ordered that the said SWINCOMBE VALE MINING COMPANY (LIMITED) should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

EDWARD CHILCOTT
(Solicitor for the Petitioner), Tavistock.
J. G. CHILCOTT
(Agent of the said Solicitor), Truro.

Dated 20th March, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and in the MATTER OF THE GODOLPHIN HILL MINING COMPANY (LIMITED).—The Vice-Warden has by his Order made in the above matter, and dated the 10th day of January last, APPOINTED HENRY WYNHAM PETTIS, of 16, Gresham-street, in the City of London, accountant, late provisional official liquidator of the above-named company, to be ABSOLUTELY the OFFICIAL LIQUIDATOR thereof.

WM. MICHELL, Registrar of the above-named Court.
THE HERNE and WOLFERSTAN, 75, Aldermanbury, London
(Solicitors to the Official Liquidator).
CARLYON and PAUL, Solicitors, Truro, Cornwall
(Agents for the said Solicitors).

Dated this 15th day of March, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and in the MATTER OF THE GODOLPHIN HILL MINING COMPANY (LIMITED).—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY ARE REQUIRED, on or before Wednesday, the 3rd day of April next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to HENRY WYNHAM PETTIS, at No. 16, Gresham-street, in the City of London, the Official Liquidator of the company.

WM. MICHELL, Registrar of the above-named Court.
THE HERNE and WOLFERSTAN, 75, Aldermanbury, London
(Solicitors to the Official Liquidator).
CARLYON and PAUL, Solicitors, Truro, Cornwall
(Agents for the said Solicitors).

Dated this 20th day of March, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the GREAT WHEAL FORTESCUE MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY ARE REQUIRED, on or before the 3rd day of April next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to WILLIAM MICHELL, Esq., the Registrar of the said Court, at his office in Truro.

Dated Registrar's Office, Truro, 20th March, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the NORTH CHIVERTON MINING COMPANY.—The Registrar of the Court has appointed Tuesday, the 2nd day of April next, at Eleven o'clock in the forenoon, at the Registrar's Office, in Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office.

WM. MICHELL, Registrar at the said Court.

Dated the 18th day of March, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the SOUTH CARADON WHEAL HOOPER MINING COMPANY.—The Registrar of the Court has appointed Friday, the 6th day of April next, at Eleven o'clock in the forenoon, at the Registrar's Office, in Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office.

WM. MICHELL, Registrar of the said Court.

Dated the 18th day of March, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the WEST ROSEWARNE MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY ARE REQUIRED, on or before the 3rd day of April next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to WILLIAM MICHELL, Esq., the Registrar of the said Court, at Truro.—Dated Truro, March 21, 1867.

WHEAL REETH, LELANT, NEAR ST. IVES ROAD STATION.

MR. BURGESS, Land and Machinery Valuer, Barncoose, Redruth, is instructed to OFFER FOR SALE, BY PUBLIC AUCTION, on Wednesday, March 27, at Eleven o'clock in the forenoon, the WHOLE of the VALUABLE ENGINES, MACHINERY, and PITWORK, on that EXTENSIVE TIN MINE, WHEAL REETH, LELANT, near ST. IVES ROAD STATION, comprising the following—

A 40 in. cylinder ENGINE, 9 ft. stroke; with TWO BOILERS, 10 tons each, and fittings.

A 40 in. cylinder MAN ENGINE, 9 ft. stroke, equal beam; ONE BOILER, 10 tons, with all the necessary attachments for the said man engine.

A 30 in. cylinder STAMPING ENGINE, fly-wheel, complete; ONE BOILER, and fittings.

Four balance bobs, 2 nearly new, for man engine, capstan and shears; 20 in. cylinder winch (double), 8 ft. by 7 ft. stroke, with a first-class cage, and about 400 fms. of wire rope; 3 large 12 ft. shovels, modern and light; a large quantity of 18 in. 2, 4, 6, and 8 ft. pulleys and brackets; a large quantity of pulleys, for carrying wood rods, 8 in. wide, 2 ft. high; 200 fms. 6, 7, 8, and 10 in. wood rods; a large quantity of fagotted and rolled plates for wood rods, and rod bolts for ditto; tramroad iron; tram wagons for surface and underground; skips and kibbles; machine and horse whim ditto; lot of first-class iron water barrels; horse whim, and shaft tackle, &c.

PITWORK.
Sixty fathoms 9 in. plunger lifts, 40 fms. 8 in. ditto, 30 6 in. ditto, 48 5 in. ditto, 30 5 in. ditto, and 4 in. ditto—all with bottoms to match; 9 plunger poles, stuffing boxes and glands, ladders, cisterns, and winches; a quantity of 9-16 good chain and good horse whim rope, 6 in.

SMITHY SHOP.
Three sets of smiths' bellows, 3 anvils, vices, and smiths' tools, screw stocks, taps and plates, a large quantity of old borer steel and new ditto; from 15 to 20 tons of old cast and wrought iron, tin dressing machinery, old timber, and sundries.

Minute particulars will be sent in circulars to all known buyers; others can be supplied on application to the auctioneer, Barncoose, Redruth.

Mr. BURGESS will sell, on application, any part of the machinery or materials required in the mean time, or to Capt. URKS, on the mine.

Liberal reductions, as usual, and conveyance for purchasers meeting the down train at Hayle, 9-2 A.M., and up to St. Ives, 9-29 A.M.
Dated Barncoose, Redruth, March 13, 1867.

MERIONETHSHIRE—IMPORTANT TO QUARRY PROPRIETORS, BUILDERS, AND OTHERS.

LARGE SALE OF FIRST-CLASS MODERN QUARRY MACHINERY, including Hunter's PATENT SAW (new), WATER-WHEEL, PLANING and SAWING MACHINES, TWO HUNDRED TONS OF SLABS and SLATES, &c., at CAEY-COED SLATE AND SLAB QUARRY, near MAENTWROG.

MR. WILLIAM DEW begs to announce that he has been instructed to SELL, BY AUCTION, on Thursday, the 4th April (commencing at Eleven o'clock A.M. precisely), the whole of the very VALUABLE PLANT and MACHINERY at the above-named quarry, situate equidistant between Maentwrog and Festiniog, comprising—

ONE of Hunter's PATENT DISC SAWING MACHINES, 4 blades, bed 14 ft. by 10 ft.; Hunter's PLANING MACHINE, bed 10 ft. 3 in. by 5 ft. 3 in.; a PLANING MACHINE, by Williams, Portmadoc, bed 9 ft. by 4 ft. 6 in.; Thomas and De Winton's SAWING MACHINES, for either hand or water-power; a splendid WATER-WHEEL, 30 ft. diameter and 4 ft. breast, powerful cranes, driving gear, water balances, timber framed incline, 237 ft. long, at a gradient of 1 in 3.

New circular saws, blasting powder, fuse, a large quantity of steel and bar iron, 3000 lineal yards of bridge T and flat frame rails, sleepers, wire-rope, chains, Weston's differential blocks, iron wagons, turn-tables, 500 yards wooden troughs, 200 yards 12 in. glazed pipes, smiths' tools, taps and dies, horizontal break wheel for incline, large wooden shed, quarry tools, &c.

Also, upwards of TWO HUNDRED TONS OF SLABS and SLATES lying at the quarry and at Cemlyn Wharf.

The whole of the above costly machinery, &c., having only recently been fitted up, at a large outlay, the auctioneer begs to draw the attention of quarry proprietors to this very attractive sale.

The quarry abuts upon the turnpike-road leading from Maentwrog to Festiniog, and is within a mile and a half from the Cemlyn Wharf, whence 6-ton boats ply for Portmadoc.

Descriptive catalogues may be had at the principal hotels at Portmadoc, Festiniog, Maentwrog, and Tan-y-bwch, and from the Auctioneer, Wellfield House, Bangor.

FOR SALE, and may be seen at the Ashburton Mines, ONE 54 in. PUMPING ENGINE, with TWO 11 ton CORNISH made BOILERS. ONE 40 in. PUMPING ENGINE, only made a short time, and as good as new, with an 11 ton BOILER. A 34 in. WHIM ENGINE, with stamps attached. ONE 11 ton BOILER. Several WATER-WHEELS of various sizes, one with a very excellent drawing machine attached. Pumps and materials of all sorts and sizes.—Application may be made to Mr. W. MATTHEWS, engineer, Tavistock, or can be seen on application to people in charge of the mine.

In Chancery.

IN THE MATTER OF THE COMPANIES ACT, 1862, AND IN THE MATTER OF THE NANT COAL COMPANY (LIMITED).
TO COLLIERY PROPRIETORS AND OTHERS.—SALE OF THE NANT COLLIERY, FLINTSHIRE.

MR. J. PICKERING has received instructions from the Liquidators appointed to wind-up this company, to OFFER FOR SALE, BY AUCTION, on Wednesday, the 17th day of April, 1867, at the Grosvenor Hotel, in the City of Chester, at Three for Four o'clock (unless disposed of by tender on or before the 1st of April), the whole of the EXTENSIVE and very VALUABLE MINERAL PROPERTY, known by the name of the

"NANT COLLIERY."

Situated three miles from the town of Mold, nine from Chester, and twenty from the shipping port of Birkenhead, together with the LEASES, PLANT, MACHINERY, &c.

The area of this property is about 500 acres of the best mineral ground in Flintshire, containing all the celebrated North Wales Steam and House Coal, and Cannel. It is held by leases granted by the Lords of the Manor of Mold and the Trustees of Ruthin Grammar School. These leases are for a term of twenty-one years each, seventeen of which respectively are unexpired. They contain the usual clauses for renewal, if required. The royalties and mineral rents are very moderate.

Of the area above mentioned about 40 acres only have been wrought, leaving the remainder intact.

The Mold branch of the London and North Western Railway runs through the centre of the property, and the pits are connected with it by a private motive branch nearly a thousand yards long, with all junctions, points, crossings, gates, &c., complete, thus affording convenient access by the narrow-gauge system to all parts of the kingdom.

The PLANT on the colliery is very extensive and good. It comprises ONE HORIZONTAL HIGH-PRESSURE PUMPING ENGINE, with three boilers and fittings, cranks, bobs, rods, and 12-in. pitwork complete; TWO ditto WINDING ENGINES, with three boilers and fittings, double pit-head frames, flat wire ropes, cages and conductors, complete; capstans, shears, jackroll, &c.; wrought-iron screens, with iron tripplers; a PORTABLE ENGINE, and iron saw-bench of the most modern construction, with self-acting adjustment and two circular saws of 4 ft. and 3 ft. diameter respectively; a TANK LOCOMOTIVE ENGINE, nearly new; a large quantity of iron tubs, water tanks, rails, plates, and crossings; a very good and useful assortment of smiths' and carpenters' tools, various timber, stores, and loose materials.

This colliery being immediately contiguous to the extensive and well-known Buckley Brick and Tile Works, which consume a very considerable amount of fuel, a constant local demand is afforded for its produce.

The whole will be sold in one or more lots, of which due notice will be given. The Auctioneer has much pleasure in offering this valuable property to capitalists as an investment rarely to be met with.

Tenders may be forwarded to the Liquidators, but they will not be bound to accept the highest or any tender that may be made.

For further particulars, and to view the same, apply to Mr. J. HOLCROFT, the premises; the Liquidators, H. MCNEIGHT, Esq., 6, Raymond's-building, Gray's Inn, London, and 21, Waterloo-street, Birmingham, and ALFRED HARRISON, 48, Paradise-street, Birmingham; or ROBERT H. FOSTER, Esq., Solicitor, Birmingham; and to the Auctioneer, the Eastgate, Chester.

Catalogues, containing plans, sections, &c., can be had twenty-one days prior to the day of sale, from the Auctioneer, and from the principal hotels in Chester, Mold, and Birmingham.

GLAMORGANSHIRE.

MR. ROBERT EVANS will SELL, BY AUCTION (unless previously disposed of by private contract), in One Lot, at the Capel Hotel, Neath, on Thursday, the 25th day of April, 1867, at Two o'clock in the afternoon precisely, a VALUABLE COLLIERY, known as—

THE VENALLT STEAM COAL COLLIERY.

In full working order, situate in the parish of Llantwit Juxta Neath, in the county of Glamorgan, within 15 miles of the ports of Swansea, Port Talbot, and Briton Ferry, with which it has direct railway communication, comprising VALUABLE SEAMS OF STEAM COAL. Among the seams in the Upper Series included the famous Resolven vein of steam coal, on the Admiralty List, and intensively worked on the adjoining property; together with the iron ore, blackband, held in high repute, lying above the level of the River Neath, and under certain lands called the Venallt, containing about 430 acres, and held on a term of 56½ years (lessen days), or thereabouts, at moderate royalties.

The Vale of Neath Railway (broad and narrow gauge) runs through the Venallt Estate, placing the colliery in direct communication with the ports of Swansea, Port Talbot, and Briton Ferry; also with Liverpool and the North, and by the Great Western Railway there is direct communication with London, the tolls between the colliery and the Paddington Terminus (including duties) being under 8s. per ton.

All the necessary works, appliances, and buildings have been erected, and very commodious broad and narrow gauge railway sidings, tipping stations, roads formed, and about 20 excellent cottages are held at moderate rents.

The two upper veins have been thoroughly opened by level and shaft; underground roads and airways have been so far completed that at the present time from 100 to 150 tons of coal a-day can be raised, which within six weeks could be increased to 200 tons.

Particulars and conditions of sale, with plan, may be obtained of Messrs. TUCKER and NEW, solicitors, 4, King-street, Cheapside, London; at the principal inns at Swansea, Neath, Cardiff, and Newport; and of Mr. ROBERT EVANS, land agent and auctioneer, Bridgend. May be viewed by giving notice on or day's previous notice to Mr. WILLIAM EVANS, agent, Venallt Colliery, Glyn Neath.

PRELIMINARY ADVERTISEMENT.

IMPORTANT IRONWORKS IN MONMOUTHSHIRE FOR SALE.
THE CWM CELYN, BLAINA, AND COALBROOK VALE IRONWORKS.
BRAND C & C.

MESSRS. FULLER AND HORSEY are instructed to SELL, early in May, at the Auction Mart, London (unless previously sold by private contract), the important, extensive, and valuable MINERAL ESTATE known as the—

CWM CELYN, BLAINA, AND COALBROOK VALE IRONWORKS Situate in the parish of ABERYSTWYTH, in the county of MONMOUTH, on a commodious wharf at the shipping port of Newport.

The Estates include 999A. 0n. 22p. of MINERAL PROPERTY, of which 100 in. 12p. are freehold, and 559A. 2R. 9p. are leasehold, with BLAST FURNACE, FORGES, MILLS, and other necessary machinery, capable of turning out yearly quantity of 40,000 tons of finished iron; numerous pits for working minerals, foundries, engineering shops, and timber sawmills, all connected by complete system of railways, with locomotive-engines, extensive rolling stock, and every other requisite for advantageously carrying on the manufacture of iron, or for the raising of coal for sale purposes. The forges and mills have averaged for six years a yearly make of 30,000 tons of finished iron.

The minerals are well opened and drained, and in quality and quantity equal to any in the district; the coal for steam purposes is of first-class quality.

The brand, or make, of the iron is well known in Great Britain, on the Continent, in the United States, and the Colonies.

The works are distant 20 miles from the shipping port of Newport, and are intersected by the Monmouthshire Railway, affording a direct transit to the port and also to the inland markets.

The wharf at Newport, held in connection with the works, is most convenient situate, close to the docks, and a large sum of money has been expended upon it, so as to render it one of the best wharves at the port.

More detailed advertisements will shortly appear, and particulars obtained on application to Mr. FREDERICK LEVICK, Blaina Ironworks, near Newport, Messrs. FREDERICK LEVICK and Co., 4, Charlotte-row, Mansion House, London, E.C.; Messrs.

INEXPLOSIVE BLASTING POWDER

(Invented by G. A. NEUMEYER)

CANNOT EXPLODE WHEN EXPOSED TO AIR!

ALL INTERESTED IN COLLIERY, MINING, AND ENGINEERING OPERATIONS are invited to TEST this NEW INEXPLOSIVE COMPOUND, which meets with great favour upon the Continent, where it has been in use for some time past.

This powder combines STRENGTH with SAFETY to a degree never before known. It is more economical than ordinary blasting-powder:—

- 1.—Because it is cheaper in first cost.
- 2.—It is lighter than the blasting-powder now in use.
- 3.—With same bulk (which is less weight) more effect is produced.

EDWIN H. NEWBY is now prepared to register orders for the above. Particulars, post free, on application to the offices, No. 39A, KING WILLIAM STREET, CITY, LONDON.

CLAYTON, SHUTTLEWORTH, AND CO.,
LINCOLN,
And 78, LOMBARD STREET, LONDON.

Illustrated catalogues containing the latest revised price-lists and particulars of PORTABLE AND STATIONARY STEAM-ENGINES (from 4 to 40-horse power), Threshing, Grinding, Pumping, Sawing Machinery, &c., &c., will be forwarded free on application as above.

TRACTION ENGINES FOR COMMON ROADS, AND FOR STEAM CULTIVATION.

NOTE.—Nearly EIGHT THOUSAND ENGINES have been made by this firm within the last few years, and upwards of SIX THOUSAND THRASHING MACHINES.

JOHN AND EDWIN WRIGHT,

PATENTEES.

(ESTABLISHED 1770.)

MANUFACTURERS OF EVERY DESCRIPTION OF IMPROVED

PATENT FLAT AND ROUND WIRE ROPES,
From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPULING, OIL SHEETS, BRATICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.

UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.

No. 2, OSWALD STREET, GLASGOW.

CITY OFFICE, No. 3, LEADENHALL STREET, LONDON, E.C.

GLAHOLM AND ROBSON,

HENDON PATENT ROPEWORK, SUNDERLAND,

MANUFACTURERS OF ALL DESCRIPTIONS OF STEEL IRON, AND HEMP ROPES FOR COLLIERIES, SHIPS, &c.

Swan Rope Works.

GARNOCK, BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL.
MANUFACTURERS OF FLAT AND ROUND HEMP AND IRON AND STEEL WIRE ROPES FOR MINING, RAILWAY, AND SHIPPING PURPOSES. MANILLA ROPE OF SUPERIOR QUALITY, FIFTY PER CENT. STRONGER AND THIRTY PER CENT. CHEAPER THAN RUSSIAN HEMP ROPE. WIRE ROPE OF FIRST QUALITY WIRE, AND THE HIGHEST STANDARD OF STRENGTH.

PATENT FLEXIBLE TUBING
AND BRATICE CLOTH FOR MINES,

MANUFACTURED BY

ELLIS LEVER,

PATENTEES.

WEST GORTON WORKS, MANCHESTER.

TO COLLIERY PROPRIETORS.

BEST CHARCOAL IRON AND STEEL WIRE ROPES,
Also HEMP ROPES, for MINING PURPOSES.

ELLIS LEVER,

WEST GORTON WORKS, MANCHESTER.

THE CORNWALL BLASTING POWDER COMPANY,

ST. ALLEN GUNPOWDER MILLS, TRURO.

MANUFACTURERS OF PATENT BLASTING POWDER, ORDINARY GUNPOWDER, AND WATERPROOF SAFETY BLASTING CARTRIDGES.

THE CORNWALL BLASTING POWDER COMPANY SOLICIT PARTICULAR ATTENTION to their PATENT BLASTING POWDER, which has now been fully tested by time, and the growing estimation in which it is held by working men proves its great superiority over ordinary gunpowder. It possesses the following advantages:—

Its WEIGHT being about TWENTY-FIVE PER CENT. LESS than ORDINARY GUNPOWDER, and EQUAL in STRENGTH, bulk for bulk, an IMPORTANT SAVING is effected in the score of CONSUMPTION. It creates, on explosion, only about ONE-HALF as much SMOKE as ORDINARY GUNPOWDER, and this smoke being of a lighter nature soon passes away, and an IMPORTANT SAVING is thus EFFECTED on the score of TIME. It is ADAPTED to ANY CLIMATE, DOES NOT BECOME WASTEFUL by EXPOSURE to the ATMOSPHERE, is NOT MORE DANGEROUS in use than ORDINARY GUNPOWDER.

Testimonials forwarded on application.

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.—The EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close ends is immense. It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton. Being heavier than water it sinks to the bottom of a wet hole, no other tamping than water being required.

A charge of this blasting oil, which is now being used with wonderful effect in all the largest quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous blows from any other blasting material would do.

This invaluable quarrying agent may now be obtained from Messrs. W. & A. Carnarvon, sole consignees from the patentee.

BRITISH, COLONIAL, AND FOREIGN PATENTS,
REGISTRATION OF DESIGNS, COPYRIGHTS, TECHNICAL TRANSLATIONS, DRAWINGS, &c.

Mr. MICHAEL HENRY,

Member, Soc. Arts, Assoc. Soc. Engineers, Author of the "Inventors' Almanac," and the "Defence of the Patent Law."

PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.

Inventors advised in relation to Patents and Inventive and Industrial Matters. Printed information sent free by post. Specifications drawn and revised. Searches conducted. Abstracts, Cases, and Opinions drawn.

Translations of Catalogues, Trade Notices, and Circulars for the approaching Paris Exhibition. Mr. HENRY has had special experience in technical French, and in French Manufacturing and Commercial Matters.

Offices, 68, Fleet-street, E.C., London, corner of and entrance in Whitefriars-street.

Just issued, price 6d.,

LORD REDESDALE, AND THE NEW RAILWAYS.
A REVIEW OF HIS LORDSHIP AS A RAILWAY LEGISLATOR.

In a LETTER BY R. S. FRANCE, Railway Contractor.

"There was in a City a Judge."—Parable, &c.

Printed for the author by Witherby and Co., 4, Middle-row-place, Holborn, London.—May be ordered through all booksellers.

Also, just published,

LORD REDESDALE, AND THE NEW RAILWAYS
CORRESPONDENCE BETWEEN HIS LORDSHIP AND MR. FRANCE

"He that is first in his own cause seemeth just, but his neighbour cometh and searcheth him."—From a very old book.

London: Printed for the Author of the Pamphlet by Jones and Tinkler, 15 Portugal-street, Lincoln's Inn-fields.

TESTIMONIAL TO THE "WESTERN DAILY MERCURY."

A strong desire having been expressed by many friends to free Mr. Latimer, the proprietor of the Western Daily Mercury, from the very heavy costs (amounting to several hundred pounds) incurred in the recent action brought against him by Gale's Patent Protected Gunpowder Company (Limited), a meeting was held yesterday, March 7, at the Royal Hotel, Plymouth, at which it was unanimously determined that a public subscription should be opened for that purpose.

The costs were incurred in the defence of an action brought against Mr. Isaac Latimer for a so-called libel on Gale's Protected Gunpowder Company (Limited), the article being an exposure of the manner in which that company was got up, and the great loss of all the shareholders concerned. At the time of the hearing, the case was withdrawn, the case not being tried, and the defendant was thus freed from heavy costs.

The propriety of the course taken by Mr. Latimer has been proved by the subscription made by the Master of the Rolls for winding-up the company. Descriptions will be received by—

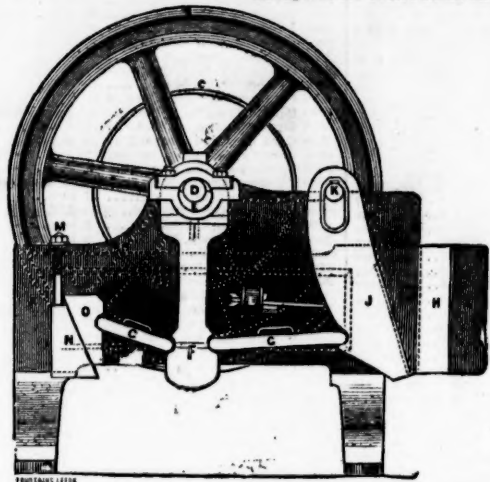
HENRY LUSCOMBE, Esq., Treasurer, 11, Vauxhall-street, Plymouth.

G. W. DERRY, Esq., Hon. Sec., Courtenay-street, Plymouth.

IMMENSE SAVING OF LABOUR.**TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MCADAM ROAD MAKERS, &c., &c.****BLAKE'S PATENT STONE BREAKER,**
OR ORE CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour. For the Parys Mining Company, JAMES WILLIAMS.

H. R. Marsden, Esq.

Ecton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given us satisfaction. Some time after starting the machine a piece of the moveable jaw about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws the machine to the size fixed for crushing the emery. For the Parys Mining Company, THOS. GOLDSWORTHY & SONS.

H. R. Marsden, Esq.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS.

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered third machine for this estate. SILAS WILLIAMS.

For circulars and testimonials, apply to—

H. R. MARSDEN, SOHO FOUNDRY,

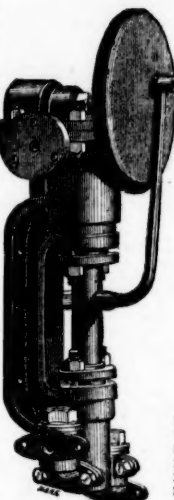
MEADOW LANE, LEEDS,

ONLY MAKER IN THE UNITED KINGDOM.

THE NEW PATENT INJECTOR,

FOR FEEDING BOILERS AND RAISING WATER FOR OTHER PURPOSES.

[SPECIFICATION.]



SIDE ELEVATION.

This injector is a steam-pump, constructed on a principle entirely new and of great simplicity. The crank-shaft and fly-wheel are of small size, and the slide-valve is worked inside the steam chest by means of a steel crank and friction roller, thus dispensing with eccentric, rod, and straps. All the working parts are made of steel, hardened and polished. The cylinder and pump are in one casting, and bored throughout the body of the pump as well as the stuffing-box. The pump-ram is of the best gun-metal, being cast in one piece with the piston and piston-rod, and fitted accurately to the bored body of the pump, thus ensuring a nearly perfect vacuum in pumping. The stuffing-box glands are also of gun-metal polished. The valves and boxes are of the best gun-metal, the valves being of the spherical description, the covers fitted with brass cages, and the joints faced metal to metal. The slide-valve is of hard bell-metal. The steam-chest, with cylinder end, is in one piece, and may be removed without disturbing either steam or exhaust pipes. The whole engine may be taken to pieces and put together under steam in fifteen minutes, without disturbing any pipes whatever.

PRICES, DELIVERED IN LONDON:—		Approx. gallons thrown per hour.		Approx. h.p. boiler supplied.	
No.	Size.	Ram.	Stroke.	At 100 rev.	At 150 rev.
4	1 1/2 in.	1 1/2	3	15	115
5	1 3/4	1 3/4	3	22	180
6	1 7/8	1 7/8	4	30	240
7	2 in.	2	4	40	345
8	2 1/4	2 1/4	5 1/2	55	475
9	2 1/2	2 1/2	5 1/2	75	585
10	2 3/4	2 3/4	6 1/2	90	720
11	3 in.	3	6 1/2	110	870
12	3 1/4	3 1/4	8	120	1030

Terms: Nett Cash on Delivery.

All guaranteed to work efficiently, and any one failing to give entire satisfaction may be at once returned.

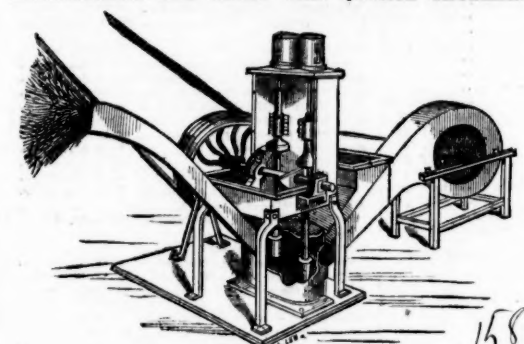
This injector will force water at or under a temperature of 212° Fahr. It will draw water 15 ft., or by using one size larger than required for forcing the quantity, it will draw from a depth of 30 ft. It will work with a pressure of steam of 15 lbs. per square inch; to work at a lower pressure the next larger size must be used, which is made with a reduced ram. This instrument will not become encrusted through forcing bad water, and it will force semi-fluids. Any unskilled labourer may work it, and after starting it requires no attention. The ordinary speed of working is 150 revolutions per minute, but higher speeds may be used without harm to the engine. Larger sizes, and special pumps for throwing water into tanks, or for use as fire-engines, can be made in a few days. Upwards of 120 of these injectors are already in use, four-fifths of the number in the United Kingdom. A circular, with full explanation and comparisons, will be sent on application.

BROWN, WILSON, AND CO.,

80, CANNON STREET, E.C.; AND VAUXHALL IRONWORKS, LONDON, S.



FRONT ELEVATION.

CHILDS' PATENT**ATMOSPHERIC ORE STAMP AND QUARTZ CRUSHER.**

THIS is an IMPROVED STAMP, and will give as many blows per minute as an ordinary 10-stamp mill, and of far greater force, giving an effective blow of from 150 to 200 tons per minute, and will crush any known ore to an impalpable powder, saving every particle of the product for future operations,—a result not before obtained by any stamping process. Greater economy is combined than by any other known method. The patentee has erected a machine near his office, where he invites (by appointment) experienced and practical miners, engineers, chemists, metallurgists, and all others interested, to inspect its results. Every facility will be given for experiments upon different ores, and all other substances to be crushed. For particulars, address—

A. B. CHILDS,

No. 481, NEW OXFORD STREET, LONDON, W.C.

THOMAS TURTON AND SONS,

MANUFACTURERS OF

CAST STEEL FOR PUNCHES, TAPS, AND DIES,

TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CRANK PINS, CON

NECTING RODS, STRAIGHT AND CRANK

AXLES, SHAFTS and

FORGINGS OF EVERY DESCRIPTION.

DOUBLE SHEAR STEEL

BLISTER STEEL,

SPRING STEEL,

GERMAN STEEL,

Locomotive Engine, Railway Carriage and Wagon

Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.

LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.

Where the largest stock of steel, files, tools, &c., may be selected from.

CREASE'S NEW AND IMPROVED PATENT BORING

MACHINE.—In consequence of the various and IMPORTANT IMPROVEMENTS that an experience of several years has enabled the inventor to introduce into these machines, he can with the most perfect confidence recommend them for their increased DURABILITY, SIMPLICITY, ECONOMY, and SPEED to be attained by their adoption in DRIVING LEVELS or DRIFTS.

The inventor has made arrangements to supply them in any quantity, with warranty. Orders executed according to their date of priority.

Address, EDWARD S. CREASE, Tavistock, Devon.

PRENTICE'S GUN COTTON**COMPRESSED CHARGES****FOR MINING AND QUARRYING.**

The principle thus introduced, insures the most perfect attainment of the points essential for the safety and stability of the material, at the same time securing the highest effective power. A charge of any given size exerts six times the explosive force of gunpowder.

The enormous power confined in a short length at the bottom of the hole allows of a much greater amount of work being placed before each blast, saving considerably in the labour of drilling.

Charges are made of every diameter required, the length varying with the diameter. Any number may be placed in a hole. Each charge is fully equal to one-fifth of a pound of powder.

PRICES.

Per case, containing 500 charges of any diameter 35s.

Per half case, containing 250 charges of any diameter 18s.

Per quarter case, containing 125 charges of any diameter 9s.

Terms.—Cash.

MANUFACTURED BY

THOMAS PRENTICE AND CO., 173, FENCHURCH STREET, LONDON.

WORKS, STOWMARKET.

BAGILLT OIL COMPANY (LIMITED),

FLINT.

MANUFACTURERS OF BLACK GREASE

FOR COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £5 PER TON.

TORCH AND LAMP OIL, 1s. PER GALLON (Casks free).

LUBRICATING OIL, 1s. PER GALLON (Casks free).

BICKFORD'S PATENT SAFETY-FUSE OBTAINED THE

PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNATIONAL EXHIBITION of 1857, in London, and at the IMPERIAL EXHIBITION held in Paris, in 1855.

BICKFORD, SMITH, AND CO.,

OF TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to

fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—

EVERY COIL OF FUSE MANUFACTURED by them

has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of

GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

THE NEWCASTLE CHRONICLE AND NORTHERN

COUNTIES ADVERTISER. (ESTABLISHED 1764.)

Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 185, High-street, Sunderland.

NERVOUS DEBILITY: ITS CAUSE AND CURE.—Before

seeking aid from the so-called remedies without medicine, read this valuable work on the Treatment and Cure of Nervous and Physical Debility, Loss of Appetite, Pains in the Back, Spasmodic, &c., with Plain Directions for Perfect Restoration to Health. Sent post free to any address, on receipt of two postage stamps. Letters of enquiry or details of case promptly answered.

Address, Dr. SMITH, 8, Burton-crescent, London, W.C.

DR. WATSON (of the Lock Hospital), F.R.S., Member of the

College of Physicians and Surgeons, on the SELF-CURE OF NERVOUS and PHYSICAL DEBILITY, Loss of Spirit, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with mean for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London.

Consultations daily from 11 till 3, and 6 till 8; Sundays, 10 till 1.

Just published, post free for two stamps.

WONDERFUL MEDICAL DISCOVERY, demonstrating the true causes of Nervous, Mental, and Physical Debility, Loss of Spirit, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total Divs.	Per Share.	Last Paid.
500	Alderley Edge, c. Cheshire	10 0 0	—	—	8 12 8	0 5 0	Jan. 1867
200	Botalack, f. c. St. Just	91 5 0	—	—	488 15 0	0 5 0	May, 1866
1000	British Slate Company	10 0 0	—	—	9 per cent.	—	Sept. 1866
4000	Crookwood, f. c. St. Just	12 0 0	—	—	8 7 0	0 6 0	Aug. 1866
1000	Brookfield, f. c. St. Just	12 0 0	—	—	8 7 0	0 6 0	Aug. 1866
6400	Cashwell, f. c. Cumberland	2 10 0	1 1/2	3 1	0 16 0	0 1 6	Aug. 1866
916	Cargill, s. l. Newlyn	15 5 7	—	—	13 15 0	1 0 0	Feb. 1866
1867	Cwm Erfin, f. c. Cardiganshire	7 10 0	—	—	21 18 0	1 0 0	Jan. 1867
128	Cwmystwith, f. c. Cardiganshire	60 0 0	—	—	376 10 0	4 0 0	Feb. 1867
280	Derwent Mines, s. l. Durham	300 0 0	—	—	167 0 0	5 0 0	Oct. 1866
1024	Devon Gl. Consols, c. Tavistock	1 0 0	—	—	1084 0 0	6 0 0	Mar. 1867
555	Dolcoath, f. c. Camborne	128 17 6	—	—	821 10 0	3 0 0	Feb. 1867
6144	East Caradon, c. St. Cleer	2 14 6	—	—	14 7 6	0 2 0	Jan. 1867
800	East Darren, c. Cardiganshire	32 0 0	—	—	138 10 0	2 0 0	Jan. 1867
128	East Pool, f. c. Pool, Illogan	24 5 0	—	—	392 10 0	2 10 0	Mar. 1867
5000	East Rosewarne, c. f. Gwinear	2 15 0	—	—	0 10 6	0 1 6	Jan. 1866
1906	East Wheel Lovell, f. Wendron	3 9 0	10 11	—	2 7 6	0 7 6	May, 1866
2800	Foxdale, f. l. Isle of Man	25 0 0	—	—	69 10 0	0 10 0	Jan. 1866
5000	Frank Mills, f. Christow	3 18 6	—	—	8 5 6	0 5 0	Feb. 1866
15000	Great Laxey, f. l. Isle of Man	4 0 0	—	—	6 5 0	0 10 0	Mar. 1867
5008	Great Wheal Vor, f. c. Helston	40 0 0	20 1/2	—	11 5 6	0 7 6	Mar. 1867
1024	Herodfoot, f. near Liskeard	8 10 0	33	—	40 10 0	1 0 0	Feb. 1867
6000	Lisburne Down, c. f. c.	5 10 6	—	—	0 10 0	0 10 0	Apr. 1866
400	Lisburne, f. Cardiganshire	18 15 0	—	—	486 10 0	3 0 0	Jan. 1867
9000	Marke Valley, c. Caradon	4 10 6	4 1/2	—	3 11 0	0 2 0	Jan. 1866
2000	Minera Boundary, f. Wrexham	1 0 0	—	—	0 13 0	0 3 0	Mar. 1866
1800	Minera Mining Co. f. Wrexham	25 0 0	160	170 180	208 13 0	3 0 0	Feb. 1867
20000	Mining Co. of Ireland, c. f. c.	7 0 0	—	—	—	0 5 7	Jan. 1867
40000	Mynydd Iron Ore	3 0 0	—	—	0 6 6	0 2 6	Mar. 1866
200	New Morrisby and Middleton	3 10 0	—	—	157 10 0	5 0 0	Jan. 1866
200	Parys Mines, c. Anglesey	50 0 0	—	—	0 5 0	0 5 0	Feb. 1867
6000	Prosper United, f. c. St. Hilary	8 14 0	3 1/2	3 1/2	82 7 6	0 10 0	Feb. 1867
1120	Providence, f. Uney Lelant	10 6 7	32 1/2	32 1/2	244 10 0	5 0 0	Jan. 1867
512	South Caradon, c. St. Cleer	1 5 0	330	315 325	0 5 6	0 2 6	Jan. 1866
6000	South Darren, f. c.	3 6 6	—	—	18 11 0	0 5 0	Jan. 1867
6000	Tincroft, f. c. Pool, Illogan	9 0 0	15	15 16	17 7 6	2 0 0	Feb. 1867
3000	W. Chiverton, f. Perranzabuloe	10 0 0	61	59 61	467 0 0	1 0 0	Oct. 1866
400	West Wheal Seton, c. Camborne	47 10 0	—	—	622 0 0	1 0 0	Feb. 1866
512	Wheal Bassett, c. Illogan	5 2 6	68	64 68	200 10 0	10 0 0	Feb. 1867
1024	Wheal Friendship, c. Tavistock	20 0 0	—	—	3 10 0	0 2 0	Feb. 1867
4255	Wheal Kitty, f. St. Agnes	5 4 6	—	—	61 0 0	0 12 6	Mar. 1867
1024	Wheal Mary Ann, f. Menheniot	8 0 0	—	—	1 0 0	0 10 0	Feb. 1866
2050	Wheal Rose, c. Scorrier	—	10	9 10	54 10 6	0 3 0	Oct. 1866
396	Wheal Seton, f. c. Camborne	58 10 0	106	102 107 1/2	289 5 0	3 10 0	Feb. 1867
1040	Wheal Trevelyan, s. l. Liskeard	5 17 0	11	—	45 15 0	0 18 0	Oct. 1866
7000	Wicklow, c. f. c. Wicklow	2 10 0	—	—	—	—	—

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total Divs.	Per Share.	Last Paid.
5000	Cape Copper Mining	7 0 0	8	6 1/2	2 12 6	0 10 0	Apr. 1866
10000	Don Pedro No. del Rey, Brazil	0 14 0	215	195 215	0 2 9	0 2 0	Mar. 1864
2000	Fortuna, f. Spain	2 0 0	—	—	1 5 4	0 2 0	Oct. 1866
7000	English and Australian	2 10 0	—	—	1 18 0	0 1 0	Feb. 1866
20000	Gen. Mining Assoc. Nova Scotia	20 0 0	20	18 20	22 0 0	1 0 0	June, 1866
10000	Gonnesa, f. [5000 £5 pd., 5000 £4 pd.]	—	—	—	—	—	—
15000	Linares, f. Spain	5 0 0	1	1 1/2	11 6 4	0 5 0	Jan. 1865
2000	Pestarene, f. g. t.	2 0 0	1	1 1/2	4 3 2	1 3 6	Dec. 1866
5000	Panulicello, c. f.	3 0 0	2	—	0 16 6	0 1 0	Jan. 1867
10000	Pontgibaud, s. l. France	20 0 0	8	7 1/2	4 3 2	1 3 6	Dec. 1866
10000	Port Phillip, c. Clunest	1 0 0	—	—	0 16 6	0 1 0	Jan. 1867
120000	Scottish Australian Mining Co. f.	1 0 0	—	—	72 15 0	4 0 0	Dec. 1866
1000	St. John del Rey, Brazil	15 0 0	—	—	9 0 0	1 0 0	Jan. 1866
50000	Victoria (London) [25000 £1 pd., 25000 £2 pd.]	—	—	—	0 19 6	0 2 6	May, 1865
40000	West Canada Mining Company	1 0 0	—	—	—	—	—

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total Divs.	Per Share.	Last Paid.
25000	Alamillos, f. Spain	2 0 0	—	—	—	—	—
100000	Anglo-Brazilian, f. g. t.	0 10 0	—	—	—	—	—
10000	Altun and Qandagan, f. c. t.	4 10 0	—	—	—	—	—
20000	Australian, c. South Australia	7 7 6	—	—	—	—	—
40000	Burra Silver-Lead Mines, France [15750 lss. pd.]	5 0 0	—	—	—	—	—
2464	Burra, c. South Australia	5 0 0	—	—	—	—	—
25000	Capula, s. Mexico	1 12 0	—	—	—	—	—
30000	Chontales, g. s. Nicaragua	3 7 6	—	—	—	—	—
12000	Cobre Copper Company, c. Cuba	40 10 0	—	—	—	—	—
10000	Copio Mining Company, Chile	16 10 0	—	—	—	—	—
10000	Copio Smelting, Chile	10 0 0	—	—	—	—	—
200	Copper Mines, Co. of South Australia [150 £100 pd., 150 £20 pd.]	2 15 0	—	—	—	—	—
25000	East del Rey, g. Brazil	2 15 0	—	—	—	—	—
21600	East Indian Coal, Calcutta	10 0 0	—	—	—	—	—
15000	El Chico Silver Mining and Reduction Company	5 0 0	—	—	—	—	—
8000	English and Canadian Mining Company	5 0 0	—	—	—	—	—
80000	Frontino and Bolivia, g. New Granada	1 12 6	—	—	—	—	—
80000	Great Northern, c. South Australia	1 11 6	—	—	—	—	—
19000	Great Barrier Land, Mining, &c. New Zealand	5 0 0	—	—	—	—	—
60000	Kapunda Mining Co. Australia	3 0 0	—	—	—	—	—
7927	Lusitanian (Portugal)	1 0 0	—	—	—	—	—
83000	Mariquita	0 12 6	—	—	—	—	—
12500	Nerbadda Coal and Iron [6000 £5 pd., 6500 £4 pd.]	—	—	—	—	—	—
50000	Nova Scotia Land and Gold	1 15 0	—	—	—	—	—
15000	Orca, c. New Zealand [5000 fully paid]	1 10 0	—	—	—	—	—
6000	Petal River Land and Mineral	100 0 0	—	—	—	—	—
51000	New Quebrada, c. Venezuela	3 10 0	—	—	—	—	—
10178	Rhenish Consolidated, f. [5000 £5 pd., 4178 £2 10s. pd.]	0 7 6	—	—	—	—	—
10000	Rosca Grande, g. Brazil	1 0 0	—	—	—	—	—
15000	San Pedro del Monte, s. Mexico	4 0 0	—	—	—	—	—
10000	San Roque, f. Spain	5 0 0	—	—	—	—	—
1000	Schlossberg Colliery	10 0 0	—	—	—	—	—
43174	United Mexican, s. Mexico	28 5 0	—	—	—	—	—
10000	Vancouver, c. f.	6 0 0	—	—	—	—	—
30000	Val Antigua, f. g. t.	0 17 6	—	—	—	—	—
4000	Val Sassam, s. c.	6 10 0	—	—	—	—	—
5000	Valdemar Mining Company	20 10 0	—	—	—	—	—
50000	Vallanzasca, g. Italy	0 17 6	—	—	—	—	—
45000	Victor Emanuel, c. Italy	1 0 0	—	—	—	—	—
20000	Washoe, g. t.	5 0 0	—	—	—	—	—
50000	Worthing, c. South Australia	1 0 0	—	—	—	—	—
75000	Yorke Peninsula, South Australia	1 0 0	—	—	—	—	—
45000	Yundamutana, c. S. A. f.	3 0 0	—	—	—	—	—

BANKS AND FINANCIAL COMPANIES.

Shares.	Banks.	Paid.	Last Pr.	Bus. done.
40000	Alliance**	25 0 0	17	15 16
40000	Australian Mort. Land and Financet	5 0 0	5½	5 5½
20000	Australasia†	40 0 0	68	64 66
10000	Bank of Egypt†	25 0 0	34	32 34
50000	Bank of New Zealand†	10 0 0	19	18 19
25000	Bank of Otago**	10 0 0	4	5½ 6½
20000	Bank of Victoria, Australia†	25 0 0	39	37 39
20000	British North Americant	50 0 0	50	48 50
8015	Canada Company†	32 10 0	72	68 72
50,000	Canadian Loan and Investment	2 10 0	17	15 17
40000	Chartered Bank India, Australia, and China†	20 0 0	17	15½ 16½
30000	Chartered Merc. of India, London and China†	25 0 0	33	30 32
50000	City†	10 0 0	14	13 14
20000	Colonial†	25 0 0	40	35 37
40000	Company of African Merchants.**	3 0 0	3½	2½ 3
150000	Consolidated Bank**	4 0 0	4½	4½ 4½
80000	ditto New†	3 0 0	3½	3½ 3½
20000	Credit Foncier and Mobilier of England†	9 0 0	24	23 24
20000	East London†	5 0 0	18	16 18
30000	English, Scottish, & Aust., Chart.†	20 0 0	18	16½ 17½
20000	English and Swedish**	25 0 0	15	14 15
20000	Imperial Bank**	20 0 0	24	22 24
202500	Imperial Ottoman†	10 0 0	24	24 24
150000	International Financial Society†	5 0 0	2½	2½ 2½
300000	International Land Credit†	6 0 0	4	3 4
50000	London Chartered Bank of Australia†	20 0 0	23	22 23
37500	London and County†	20 0 0	28	25 27
40000	London Financial Association†	25 0 0	58	55 57
72000	London Joint-Stock†	15 0 0	44	41 43
5000	London and River Plate†	40 0 0	46	43 45
20000	ditto ditto New, issued at ½ prem.**	10 0 0	11½	10 11
20000	ditto ditto New†	10 0 0	11½	10 11
10000	London and South-Western†	20 0 0	19	18 19
5000	London and Venezuela†	12 10 0	—	—
80000	London and Westminster†	20 0 0	35	32 34
50000	Mercantile and Exchange†	12 10 0	5	3½ 5½
10000	Merchant†	25 0 0	16½	16 17
5000	ditto New†	20 0 0	11	9 11
17128	Metroplitan and Provincial†	20 0 0	8½	8 9
4000	Midland†	20 0 0	19	18½ 19½
20000	National of Australia†	15 0 0	15½	14 15
20000	National of Liverpool†	15 0 0	15½	14½ 15½
10000	National Provincial of England†	42 0 0	—	—
55000	ditto ditto 2d and 3d issue†	12 0 0	35¾	—
40000	National†	30 0 0	65	63 65
50000	New South Wales†	20 0 0	16	14 16
60000	Oriental Bank Corporation†	25 0 0	45	41 42
27210	Oriental Banking Corporation†	10 0 0	3½	3 4
20000	Provincial of Ireland†	25 0 0	85	83 85
10000	ditto ditto New†	10 0 0	8	—
40000	Union of Australia†	25 0 0	48	46 48
10000	Union of Ireland†	22 0 0	12	12 14
80000	Union of London†	18 0 0	46	43½ 44½